

Hermetic Military

How to Order

38999 III

38999 II

38999 I

SJT

Aquacon

2M

83723

26482

26500

MILITARY	DESCRIPTION	COMMERCIAL
D38999/21	Hermetic Box Mounting Receptacle	TVPS02Y, TVPS02YN
D38999/23	Hermetic Jam Nut Receptacle	TVS07Y, TVS07YN
D38999/25	Hermetic Solder Mount Receptacle	TVSI
D38999/27	Hermetic Weld Mounted Receptacle	TVSHI

HOW TO ORDER: MILITARY

1. CONNECTOR TYPE	
38999/	MIL-DTL-38999 III

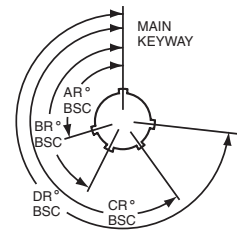
2. SHELL STYLE	
21	Box Mount Receptacle Hermetic
23	Jam Nut Receptacle Hermetic
25	Solder Mount Receptacle Hermetic
27	Weld Mounted Receptacle Hermetic

4. SHELL SIZE & INSERT ARRANGEMENTS	
Shell Size & Insert Arrangements are on pages 5-6. First number represents Shell Size, second number is the Insert Arrangement.	

5. CONTACT TYPE	
P	500 Cycle Pin Contacts
X	Pin Contacts - Eyelet
C	PC Tail

6. ALTERNATE KEYING POSITION	
A plug with a given rotation letter will mate with a receptacle with the same rotation letter. The angles for a given connector are the same whether it contains pins or sockets. Master key stays fixed, minor keys rotate. Inserts are not rotated in conjunction with the master key/keyway.	

RECEPTACLE (FRONT FACE SHOWN)



1. Connector Type	2. Shell Style	3. Service Class	4. Shell Size- Insert Arrangement	5. Contact Type	6. Alternate Keying Position
D38999/	21	Y	G35	P	N

3. SERVICE CLASS				
Military	Finish	RoHS	Material	Material/ Description
N	Stainless Steel w/ Nickel Plate	•	Stainless Steel	Hermetic connectors, corrosion resistant steel, 200°C
Y	Stainless Steel	•	Stainless Steel	Hermetic seal, 200°C passivated stainless steel

TRIPLE START THREADS									
A	B	C	D	E	F	G	H	J	Mil Shell Size
9	11	13	15	17	19	21	23	25	Amphenol Shell size

Shell Size	Key & Keyway Arrangement Identification Letter	AR° or AP° BSC	BR° or BP° BSC	CR° or CP° BSC	DR° or DP° BSC
A (9)	N*	105	140	215	265
	A	102	132	248	320
	B	80	118	230	312
	C	35	140	205	275
	D	64	155	234	304
B (11) C (13) D (15)	E	91	131	197	240
	N*	95	141	208	236
	A	113	156	182	292
	B	90	145	195	252
	C	53	156	220	255
E (17) F (19)	D	119	146	176	298
	E	51	141	184	242
	N*	80	142	196	293
	A	135	170	200	310
	B	49	169	200	244
G (21) H (23) J (25)	C	66	140	200	257
	D	62	145	180	280
	E	79	153	197	272
	N*	80	142	196	293
	A	135	170	200	310
	B	49	169	200	244
	C	66	140	200	257
	D	62	145	180	280
	E	79	153	197	272

Hermetic MIL-DTL-38999, Series III TV

How to Order (Commercial)

1.	2.	3.	4.
Type & Class	Shell Size-Insert Arrg.	Contact Type	Alternate Position
TVS07Y	11-4	P	N

1. SELECT A TYPE & CLASS

		Passivated (Non-Firewall)	Nickel Plated (Non-Firewall)
RATES	Temperature	200°C	200°C
	Salt Spray	500 Hrs	500 Hrs
	EMI Shielding	-65dB @ 10GHz	-50dB @ 10GHz
	RoHS		

Hermetic		TVPS02Y-	TVPS02YN-
	Box Mounting Receptacle		
	Jam Nut Receptacle	TVS07Y-	TVS07YN-
	Solder Mount	TVSIY-	TVSIYN-
	Weld Mounting Receptacle	TVSHIY-	TVSHIYN-

2. SHELL SIZE & INSERT ARRANGEMENTS

See table on page 5-6. First number represents Shell Size, second number is the Insert Arrangement.

3. CONTACT TYPE

P	500 Cycle Pin Contacts
X	Pin Contacts - Eyelet

See pages 16-20 for PCB Hermetic Connector options

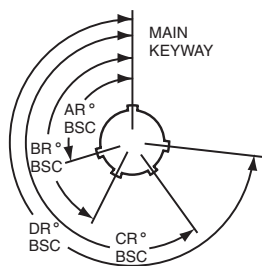
4. ALTERNATE KEYING POSITION

A plug with a given rotation letter will mate with a receptacle with the same rotation letter. The angles for a given connector are the same whether it contains pins or sockets. Master key stays fixed, minor keys rotate. Inserts are not rotated in conjunction with the master key/keyway.

Shell Size	Key & Keyway Identification Letter	AR° or AP° BSC	BR° or BP° BSC	CR° or CP° BSC	DR° or DP° BSC
9	N*	105	140	215	265
	A	102	132	248	320
	B	80	118	230	312
	C	35	140	205	275
	D	64	155	234	304
11, 13, and 15	N*	95	141	208	236
	A	113	156	182	292
	B	90	145	195	252
	C	53	156	220	255
	D	119	146	176	298
17 and 19	N*	80	142	196	293
	A	135	170	200	310
	B	49	169	200	244
	C	66	140	200	257
	D	62	145	180	280
21, 23, and 25	N*	80	142	196	293
	A	135	170	200	310
	B	49	169	200	244
	C	66	140	200	257
	D	62	145	180	280
	E	79	153	197	272

RECEPTACLE

(FRONT FACE SHOWN)



Hermetic Box Mounting Receptacle

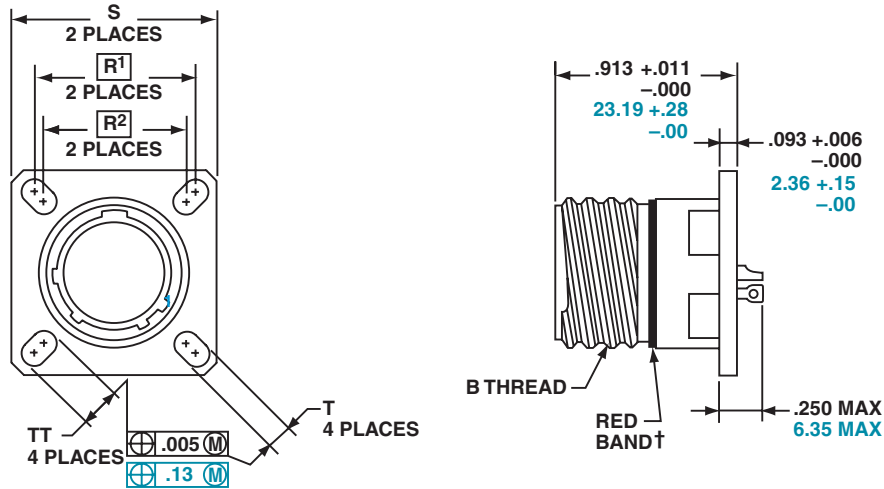
Military (D38999/21), Commercial (TVPS02)

PART NUMBER BUILDER Page 12

ONLINE CONFIGURATOR www.amphenol-aerospace.com

MILITARY
D38999/21

COMMERCIAL SS
TVPS02Y
TVPS02YN



† Red band indicates fully mated
NOTE: Consult Amphenol Aerospace for availability of non-glass-sealed versions with printed circuit tail contacts.

Inches

Shell Size	MS Shell Size Coded	B Thread 0.1P-0.3L-TS (Plated)	R1	R2	S ±.010	T ±.008	TT ±.008
9	A	.6250	.719	.594	.938	.128	.216
11	B	.7500	.812	.719	1.031	.128	.194
13	C	.8750	.906	.812	1.125	.128	.194
15	D	1.0000	.969	.906	1.219	.128	.173
17	E	1.1875	1.062	.969	1.312	.128	.194
19	F	1.2500	1.156	1.062	1.438	.128	.194
21	G	1.3750	1.250	1.156	1.562	.128	.194
23	H	1.5000	1.375	1.250	1.688	.154	.242
25	J	1.6250	1.500	1.375	1.812	.154	.242

Millimeters

Shell Size	MS Shell Size Coded	R1	R2	S ±.25	T ±.20	TT ±.20
9	A	18.26	15.09	23.83	3.25	5.49
11	B	20.62	18.26	26.19	3.25	4.93
13	C	23.01	20.62	28.58	3.25	4.93
15	D	24.61	23.01	30.96	3.25	4.39
17	E	26.97	24.61	33.32	3.25	4.93
19	F	29.36	26.97	36.53	3.25	4.93
21	G	31.75	29.36	39.67	3.25	4.93
23	H	34.93	31.75	42.88	3.91	6.15
25	J	38.10	34.93	46.02	3.91	6.15

All dimensions for reference only

☐ Designates true position dimensioning

Hermetic Jam Nut Receptacle

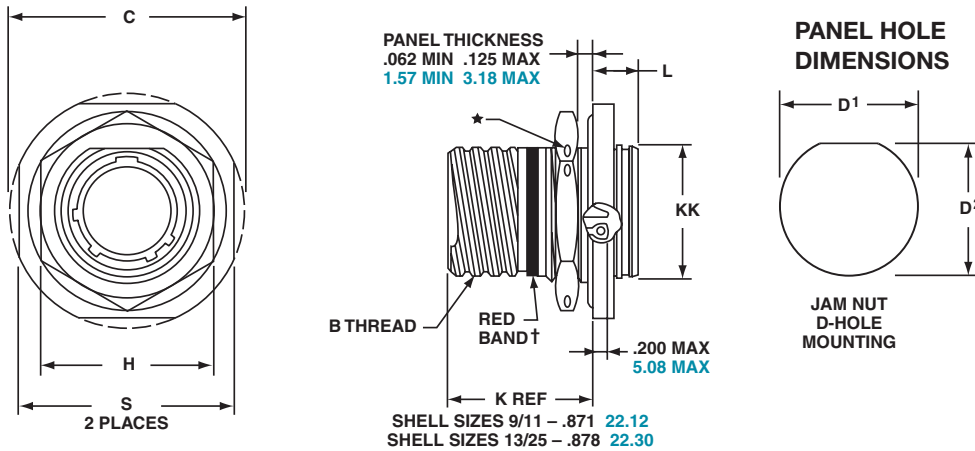
Military (D38999/23), Commercial (TVS07)

HOW TO ORDER Page 12

ONLINE CONFIGURATOR www.amphenol-aerospace.com

MILITARY
D38999/23

COMMERCIAL SS
TVS07Y
TVS07YN



†Red band indicates fully mated

*.059 dia min. 1.5 dia. min. 3 lockwire holes Formed lockwire hole design (6 holes) is optional.

Inches

Shell Size	MS Shell Size code	B Thread Class 2A 0.1P-0.3L-TS (Plated)	C Max	D ¹ +.010 - .000	D ² +.000 - .010	H Hex +.017 - .016	L Max	S ±.010	KK +.011 - .000
9	A	.6250	1.199	.693	.657	.875	.357	1.062	.642
11	B	.7500	1.386	.825	.770	1.000	.357	1.250	.766
13	C	.8750	1.511	1.010	.955	1.188	.357	1.375	.892
15	D	1.0000	1.636	1.135	1.085	1.312	.357	1.500	1.018
17	E	1.1875	1.761	1.260	1.210	1.438	.357	1.625	1.142
19	F	1.2500	1.949	1.385	1.335	1.562	.381	1.812	1.268
21	G	1.3750	2.073	1.510	1.460	1.688	.381	1.938	1.392
23	H	1.5000	2.199	1.635	1.585	1.812	.381	2.062	1.518
25	J	1.6250	2.323	1.760	1.710	2.000	.381	2.188	1.642

Millimeters

Shell Size	MS Shell Size code	C Max	D ¹ +.25 - .00	D ² +.00 - .25	H Hex +.43 - .41	L Max	S ±.25	KK +.28 - .00
9	A	30.45	17.60	16.70	22.23	9.07	26.97	16.31
11	B	35.20	20.96	19.59	25.40	9.07	31.75	19.46
13	C	38.38	25.65	24.26	30.18	9.07	34.93	22.66
15	D	41.55	28.83	27.56	33.32	9.07	38.10	25.86
17	E	44.73	32.01	30.73	36.53	9.07	41.28	29.01
19	F	49.50	35.18	33.91	39.67	9.68	46.02	32.21
21	G	52.65	38.35	37.08	42.80	9.68	49.23	35.36
23	H	55.85	41.53	40.26	46.02	9.68	52.37	38.56
25	J	59.00	44.70	43.43	50.80	9.68	55.58	41.71

All dimensions for reference only

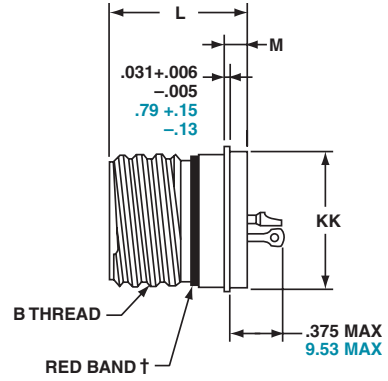
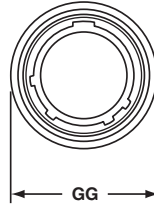
Hermetic Solder Mounting Receptacle

Military (D38999/25), Commercial (TVSI)

HOW TO ORDER Page 12
ONLINE CONFIGURATOR www.amphenol-aerospace.com

MILITARY
D38999/25

COMMERCIAL SS
TVSIY
TVSIYN



† Red band indicates fully mated

Inches

Shell Size	MS Shell Size Code	B Thread Class 2A 0.1P-0.3L-TS (Plated)	L +.011 -.005	M +.006 -.005	GG Dia. +.011 -.010	KK Dia +.011 -.005
9	A	.6250	.806	.125	.750	.672
11	B	.7500	.806	.125	.844	.781
13	C	.8750	.806	.125	.969	.906
15	D	1.0000	.806	.125	1.094	1.031
17	E	1.1875	.806	.125	1.218	1.156
19	F	1.2500	.806	.125	1.312	1.250
21	G	1.3750	.806	.125	1.438	1.375
23	H	1.5000	.838	.156	1.563	1.500
25	J	1.6250	.838	.156	1.688	1.625

Millimeters

Shell Size	MS Shell Size Code	L +.28 -.00	M +.15 -.13	GG Dia. +.28 -.25	KK Dia +.03 -.13
9	A	20.47	3.18	19.05	17.07
11	B	20.47	3.18	21.44	19.84
13	C	20.47	3.18	24.61	23.01
15	D	20.47	3.18	27.79	26.19
17	E	20.47	3.18	30.94	29.36
19	F	20.47	3.18	33.32	31.75
21	G	20.47	3.18	36.53	34.93
23	H	21.29	3.96	39.70	38.10
25	J	21.29	3.96	42.88	41.28

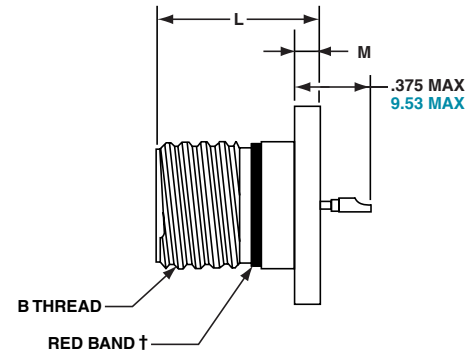
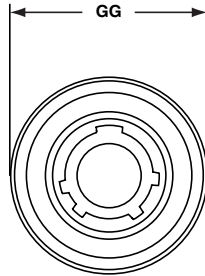
Hermetic Wall Mounting Receptacle

Military (D38999/27), Commercial (TVSHIY)

HOW TO ORDER Page 12
ONLINE CONFIGURATOR
www.amphenol-aerospace.com

MILITARY
D38999/27

COMMERCIAL SS
TVSHIY
TVSHIYN



† Red band indicates fully mated

Inches

Shell Size	MS Shell Size Code	B Thread Class 2A 0.1P-0.3L-TS (Plated)	L +.011 -.000	M +.006 -.005	GG Dia. +.011 -.010
9	A	.6250	.806	.125	.973
11	B	.7500	.806	.125	1.095
13	C	.8750	.806	.125	1.221
15	D	1.0000	.806	.125	1.347
17	E	1.1875	.806	.125	1.434
19	F	1.2500	.806	.125	1.579
21	G	1.3750	.806	.125	1.721
23	H	1.5000	.838	.156	1.886
25	J	1.6250	.838	.156	1.973

Millimeters

Shell Size	MS Shell Size Code	L +.28 -.00	M +.15 -.13	GG Dia. +.25 -.00
9	A	20.47	3.18	24.71
11	B	20.47	3.18	27.81
13	C	20.47	3.18	31.01
15	D	20.47	3.18	34.21
17	E	20.47	3.18	36.42
19	F	20.47	3.18	40.11
21	G	20.47	3.18	43.71
23	H	21.29	3.96	47.90
25	J	21.29	3.96	50.11

All dimensions for reference only

38999 III

38999 II

38999 I

SJT

Aquacon

2M

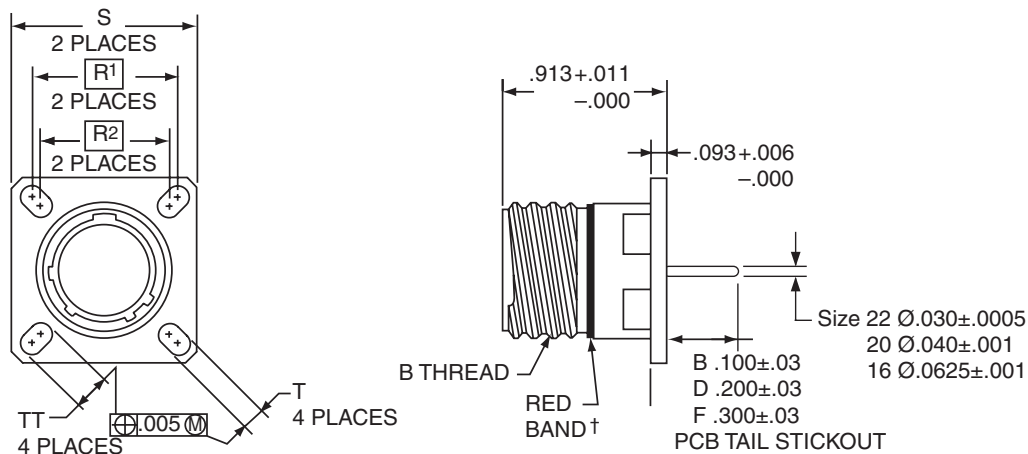
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PCB Hermetic Box Mounting Receptacle

Commercial



1. 2. 3. 4. 5. 6.

PART #	Base Number	Coded Shell Size	Insert Arrg.	Contact Type/Alt. Keying	Shell Finish	Tail Length
See chart below	10-626	501	-35	P	1	B

HOW TO ORDER

1. BASE NUMBER

10-626 Base Number for MIL-DTL-38999 Series III Hermetic with PCB Tail

2. CODED SHELL SIZE

See chart below **501-509**, designates size **9-25** shell size.

3. INSERT ARRANGEMENT

-35 Designates Insert Arrangement Number

4. CONTACT TYPE/ALTERNATE KEYING

P Designates Pin Contacts in Normal Position

Refer to insert availability chart on page 5-6.

Refer to page 12 for alternate rotation letters to use.

5. SHELL FINISH

- 1** Hermetic seal, passivated Stainless Steel, 200°C
- 2** Hermetic seal, Stainless Steel w/Nickel Plate
- 3** Carbon Steel w/reflowed tin plate

6. TAIL LENGTH

- B** .100±.03
- D** .200±.03
- F** .300±.03

† Red band indicates fully mated

Shell Size	Part Number	B Thread 0.1P-0.3L-TS (Plated)	R1	R2	S ±.010	T ±.008	TT ±.008
9	10-626 501 -XXX	.6250	.719	.594	.938	.128	.216
11	502 -XXX	.7500	.812	.719	1.031	.128	.194
13	503 -XXX	.8750	.906	.812	1.125	.128	.194
15	504 -XXX	1.0000	.969	.906	1.219	.128	.173
17	505 -XXX	1.1875	1.062	.969	1.312	.128	.194
19	506 -XXX	1.2500	1.156	1.062	1.438	.128	.194
21	507 -XXX	1.3750	1.250	1.156	1.562	.128	.194
23	508 -XXX	1.5000	1.375	1.250	1.688	.154	.242
25	509 -XXX	1.6250	1.500	1.375	1.812	.154	.242

All dimensions for reference.

□ Designates true position dimensioning

PCB Hermetic Jam Nut Receptacle

Commercial

38999 III

38999 II

38999 I

SJT

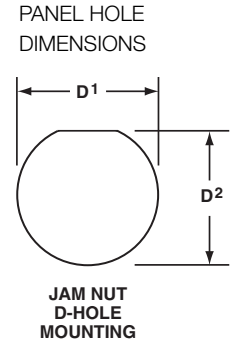
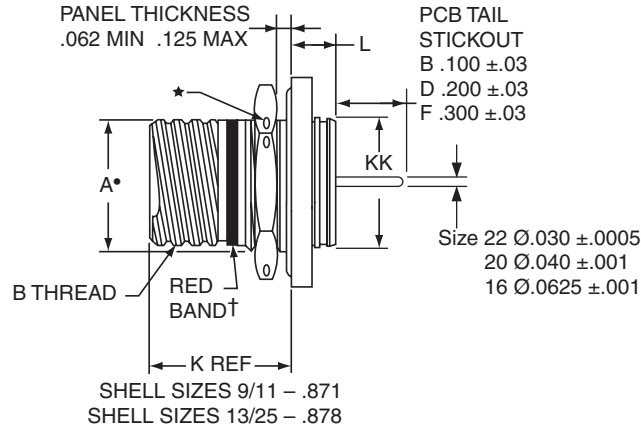
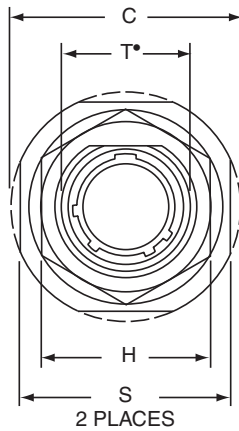
Aquacon

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PART #	1.	2.	3.	4.	5.	6.
See chart below	Base Number	Coded Shell Size	Insert Arrg.	Contact Type/Alt. Keying	Shell Finish	Tail Length
	10-626	471	-35	P	1	B

HOW TO ORDER

1. BASE NUMBER	
10-626	Base Number for MIL-DTL-38999 Series III Hermetic with PCB Tail

2. CODED SHELL SIZE	
	See chart below 471-479 , designates size 9-25 shell size.

3. INSERT ARRANGEMENT	
-35	Designates Insert Arrangement Number

4. CONTACT TYPE/ALTERNATE KEYING	
P	Designates Pin Contacts in Normal Position

Refer to insert availability chart on page 5-6.

Refer to page 12 for alternate rotation letters to use.

5. SHELL FINISH	
1	Hermetic seal, passivated Stainless Steel, 200°C
2	Hermetic seal, Stainless Steel w/Nickel Plate
3	Carbon Steel w/reflowed tin plate

6. TAIL LENGTH	
B	.100±.03
D	.200±.03
F	.300±.03

† Red band indicates fully mated

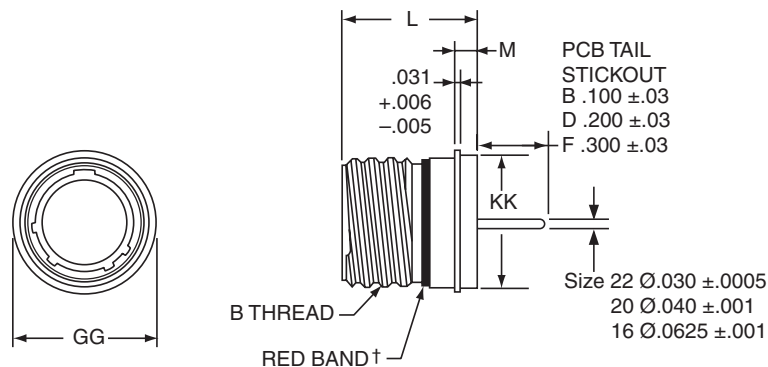
* .059 dia. min. (1.5 dia. min.) 3 lockwire holes. Formed lockwire hole design (6 holes) is optional.

Shell Size	Part Number	A+ +.000 -.010	B Thread Class 2A 0.1P-0.3L- TS (Plated)	C Max	D1 +.010 -.000	D1 +.000 -.010	H Hex +.017 -.016	L Max	S ±.010	T+ +.010 -.000	KK +.011 -.000
9	10-626 471 -XXX	.669	.6250	1.199	.700	.670	.875	.357	1.062	.697	.642
11	472 -XXX	.769	.7500	1.386	.825	.770	1.000	.357	1.250	.822	.766
13	473 -XXX	.955	.8750	1.511	1.010	.955	1.188	.357	1.375	1.007	.892
15	474 -XXX	1.084	1.0000	1.636	1.135	1.085	1.312	.357	1.500	1.134	1.018
17	475 -XXX	1.208	1.1875	1.761	1.260	1.210	1.438	.357	1.625	1.259	1.142
19	476 -XXX	1.333	1.2500	1.949	1.385	1.335	1.562	.381	1.182	1.384	1.268
21	477 -XXX	1.459	1.3750	2.073	1.510	1.460	1.688	.381	1.938	1.507	1.392
23	478 -XXX	1.575	1.5000	2.199	1.635	1.585	1.812	.381	2.062	1.634	1.518
25	479 -XXX	1.709	1.6250	2.323	1.760	1.710	2.000	.381	2.188	1.759	1.642

All dimensions for reference only.

PCB Hermetic Solder Mounting Receptacle

Commercial



PART #	1. Base Number	2. Coded Shell Size	3. Insert Arrg.	4. Contact Type/Alt. Keying	5. Shell Finish	6. Tail Length
See chart below	10-626	481	-35	P	1	B

HOW TO ORDER

1. BASE NUMBER

10-626 Base Number for MIL-DTL-38999 Series III Hermetic with PCB Tail

2. CODED SHELL SIZE

See chart below **481-489**, designates size **9-25** shell size.

3. INSERT ARRANGEMENT

-35 Designates Insert Arrangement Number

Refer to insert availability chart on page 5-6.

4. CONTACT TYPE/ALTERNATE KEYING

P Designates Pin Contacts in Normal Position

Refer to page 12 for alternate rotation letters to use.

5. SHELL FINISH

- 1** Hermetic seal, passivated Stainless Steel, 200°C
- 2** Hermetic seal, Stainless Steel w/Nickel Plate
- 3** Carbon Steel w/reflowed tin plate

6. TAIL LENGTH

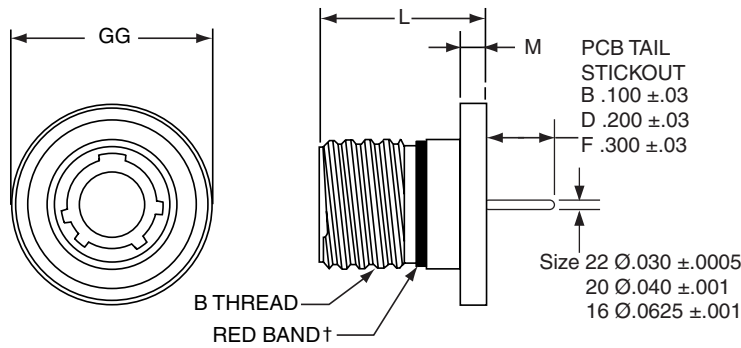
- B** .100±.03
- D** .200±.03
- F** .300±.03

† Red band indicates fully mated

Shell Size	Part Number	B Thread Class 2A 0.1P-0.3L- TS (Plated)	L +.011 -.005	M +.006 -.005	GG Dia. +.011 -.010	KK Dia +.011 -.005
9	10-626 481 -XXX	.6250	.806	.125	.750	.672
11	482 -XXX	.7500	.806	.125	.844	.781
13	483 -XXX	.8750	.806	.125	.969	.906
15	484 -XXX	1.0000	.806	.125	1.094	1.031
17	485 -XXX	1.1875	.806	.125	1.218	1.156
19	486 -XXX	1.2500	.806	.125	1.312	1.250
21	487 -XXX	1.3750	.806	.125	1.438	1.375
23	488 -XXX	1.5000	.838	.156	1.563	1.500
25	489 -XXX	1.6250	.838	.156	1.688	1.625

PCB Hermetic Weld Mounting Receptacle

Commercial



† Red band indicates fully mated

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

PART #	Base Number	Coded Shell Size	Insert Arrg.	Contact Type/Alt. Keying	Shell Finish	Tail Length
See chart below	10-626	491	-35	P	1	B

HOW TO ORDER

1. BASE NUMBER

10-626 Base Number for MIL-DTL-38999 Series III Hermetic with PCB Tail

2. CODED SHELL SIZE

See chart below **491-499**, designates size **9-25** shell size.

3. INSERT ARRANGEMENT

-35 Designates Insert Arrangement Number

4. CONTACT TYPE/ALTERNATE KEYING

P Designates Pin Contacts in Normal Position

Refer to insert availability chart on page 5-6.

Refer to page 12 for alternate rotation letters to use.

5. SHELL FINISH

- 1** Hermetic seal, passivated Stainless Steel, 200°C
- 2** Hermetic seal, Stainless Steel w/Nickel Plate
- 3** Carbon Steel w/reflowed tin plate

6. TAIL LENGTH

- | | |
|----------|----------|
| B | .100±.03 |
| D | .200±.03 |
| F | .300±.03 |

Shell Size	Part Number	B Thread Class 2A 0.1P-0.3L-TS (Plated)	L +.011 -.000	M +.006 -.005	GG Dia. +.011 -.010
9	10-626 491 -XXX	.6250	.806	.125	.973
11	492 -XXX	.7500	.806	.125	1.095
13	493 -XXX	.8750	.806	.125	1.221
15	494 -XXX	1.0000	.806	.125	1.347
17	495 -XXX	1.1875	.806	.125	1.434
19	496 -XXX	1.2500	.806	.125	1.579
21	497 -XXX	1.3750	.806	.125	1.721
23	498 -XXX	1.5000	.838	.156	1.886
25	499 -XXX	1.6250	.838	.156	1.973

* Not available for weld mount. All dimensions for reference only.