

INCH-POUND

MS27034K
20 August 2009
SUPERSEDING
MS27034J
6 February 2004

DETAIL SPECIFICATION SHEET

CONNECTORS, RECEPTACLE, ELECTRICAL, PIN INSERT,
CYLINDRICAL, MINIATURE, HERMETIC, SOLDER MOUNT

Inactive for new design after 14 November 1977.
For new design, use MIL-DTL-83723, series III.

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification sheet and MIL-DTL-26500.

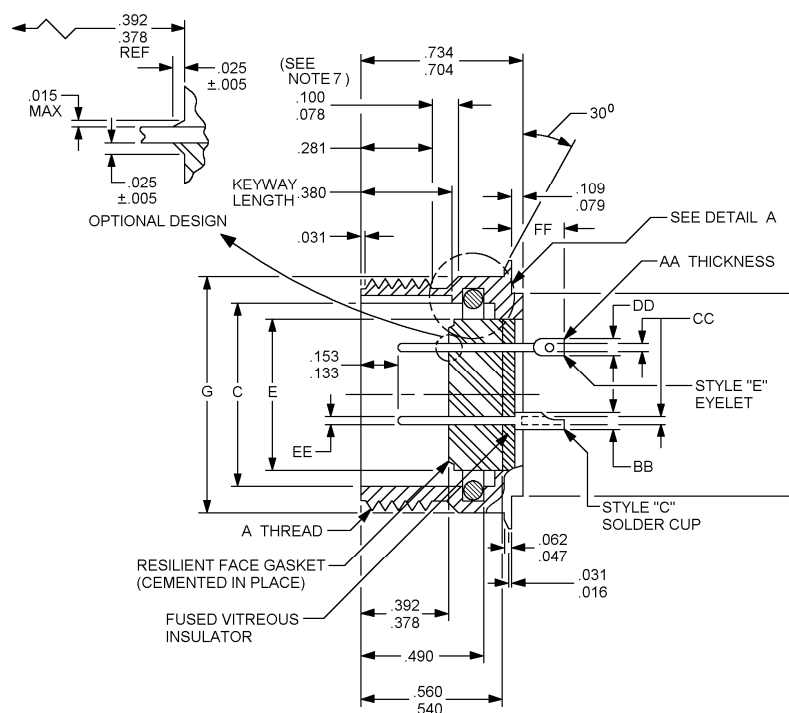
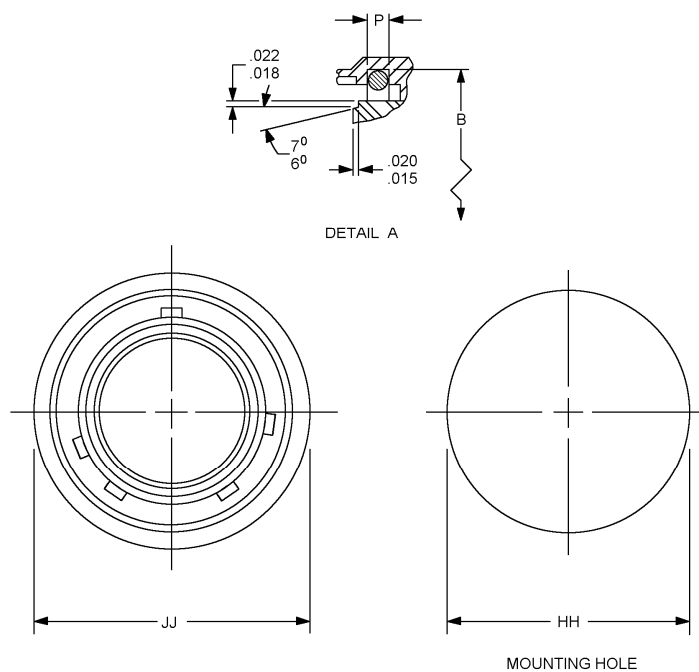


FIGURE 1. Receptacle, class H (hermetic) dimensions.

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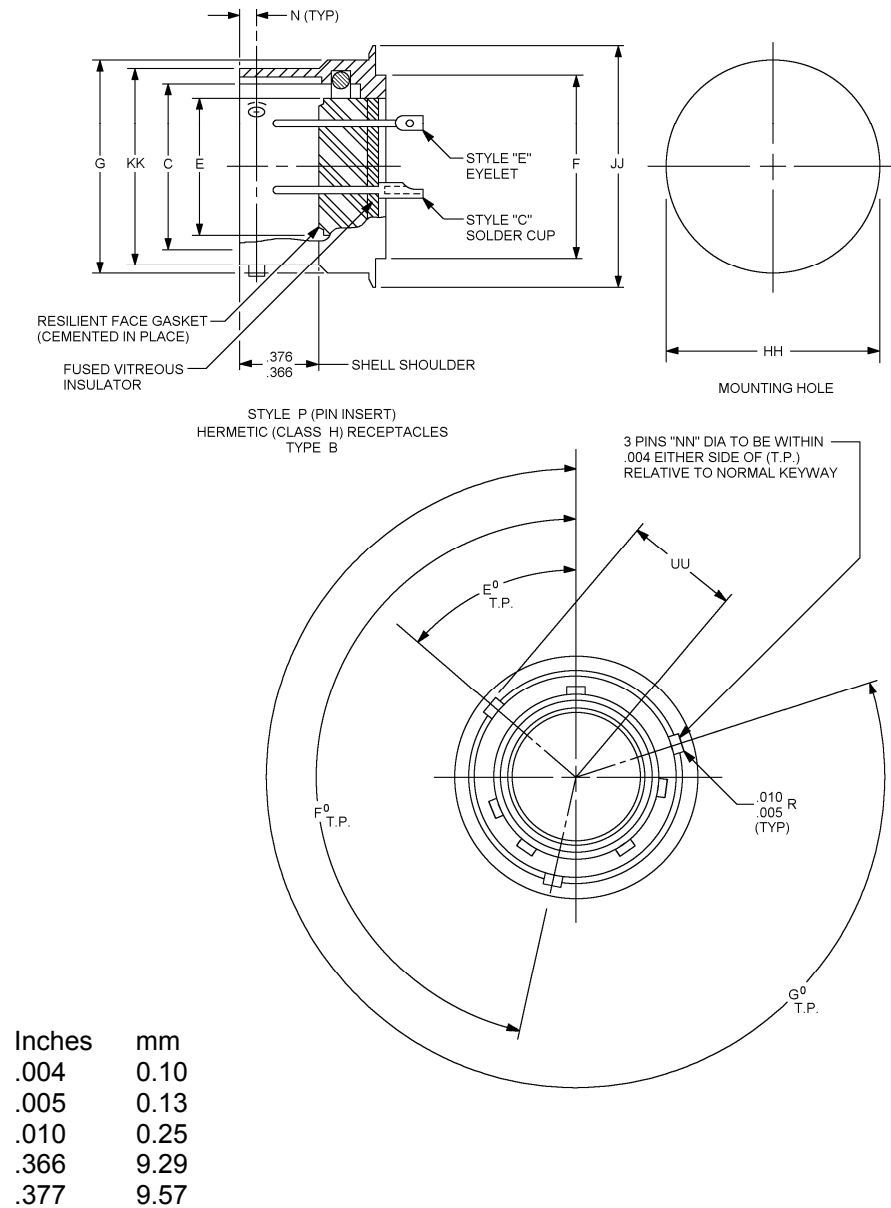


Inches	mm	Inches	mm
.016	0.41	.133	3.38
.018	0.46	.153	3.89
.019	0.48	.281	7.14
.020	0.51	.378	9.60
.022	0.56	.380	9.65
.025	0.64	.392	9.96
.031	0.79	.490	12.45
.047	1.19	.540	13.72
.062	1.57	.560	14.22
.078	1.98	.704	17.88
.079	2.01	.734	18.64

Type T
(style P)

FIGURE 1. Receptacle, class H (hermetic) dimensions – Continued.

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Type B
(style P)

FIGURE 1. Receptacle, class H (hermetic) dimensions – Continued.

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Shell size	A CPLG UNEF-2A	B dia	C dia + .005 (0.13) - .000 (0.00)	E max Insert dia (see note 9)	F max dia	G max dia	HH dia + .010 (0.25) - .000 (0.00)
8	.562-24 (14.27)	.505 (12.83)	.428 (10.87)	.312 (7.92)	.437 (11.10)	.561 (14.25)	.442 (11.23)
10	.687-24 (17.45)	.636 (16.15)	.530 (13.46)	.388 (9.86)	.562 (14.27)	.696 (17.68)	.567 (14.40)
12	.875-20 (22.22)	.805 (20.47)	.700 (17.78)	.558 (14.17)	.750 (19.05)	.875 (22.22)	.755 (19.18)
14	.937-20 (23.80)	.875 (22.22)	.769 (19.53)	.627 (15.92)	.812 (20.62)	.935 (23.75)	.817 (20.75)
16	1.062-18 (26.97)	1.002 (25.45)	.896 (22.76)	.754 (19.15)	.937 (23.80)	1.062 (26.97)	.942 (23.93)
18	1.187-18 (30.15)	1.108 (28.14)	1.002 (25.45)	.860 (21.84)	1.062 (26.97)	1.187 (30.15)	1.067 (27.10)
20	1.312-18 (33.32)	1.233 (31.32)	1.127 (28.62)	.985 (25.02)	1.182 (30.15)	1.312 (33.32)	1.187 (30.15)
22	1.437-18 (36.50)	1.358 (34.49)	1.252 (31.80)	1.110 (28.19)	1.312 (33.32)	1.437 (36.50)	1.317 (33.45)
24	1.562-18 (39.67)	1.483 (37.67)	1.377 (34.98)	1.235 (31.37)	1.432 (36.50)	1.562 (39.67)	1.437 (36.50)

FIGURE 1. Receptacle, class H (hermetic) dimensions – Continued.

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Shell size	JJ dia flange + .020 (0.51)	KK dia +.000 (0.00) -.005 (0.13)	N +.000 (0.00) -.004 (0.10)	NN +.000 (0.00) -.003 (0.08)	P +.000 (0.00) -.005 (0.13)	UU +.000 (0.00) -.009 (-0.23)
8	.705 (17.91)	.536 (13.61)	.101 (2.56)	.078 (1.93)	.076 (1.93)	.310 (7.87)
10	.840 (21.34)	.659 (16.74)	.094 (2.39)	.093 (2.36)	.089 (2.26)	.374 (9.50)
12	1.045 (26.54)	.829 (21.06)	.094 (2.39)	.093 (2.36)	.089 (2.26)	.459 (11.66)
14	1.090 (27.69)	.898 (22.81)	.094 (2.39)	.093 (2.36)	.089 (2.26)	.494 (12.55)
16	1.210 (30.73)	1.025 (26.03)	.094 (2.39)	.093 (2.36)	.089 (2.26)	.557 (14.15)
18	1.340 (34.04)	1.131 (28.73)	.094 (2.39)	.093 (2.36)	.089 (2.26)	.610 (15.49)
20	1.475 (37.46)	1.256 (31.90)	.094 (2.39)	.093 (2.36)	.089 (2.26)	.673 (17.09)
22	1.590 (40.39)	1.381 (35.08)	.094 (2.39)	.093 (2.36)	.089 (2.26)	.735 (18.67)
24	1.725 (43.82)	1.506 (38.25)	.094 (2.39)	.093 (2.36)	.089 (2.26)	.798 (20.27)

FIGURE 1. Receptacle, class H (hermetic) dimensions – Continued.

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Size of contact	Type of contact	AA	BB dia	CC dia min	DD	EE dia	FF max
12	Solder cup		.150 (3.81)	.112 (2.84)		.095/.093 (2.41/2.36)	.400 (10.16)
12	Eyelet	.035 (0.89)		.112 (2.84)	.200 (5.08)	.095/.093 (2.41/2.36)	.400 (10.16)
16	Solder cup		.103 (2.62)	.069 (1.75)		.063/.061 (1.60/1.55)	.400 (10.16)
16	Eyelet	.025 (0.64)		.069 (1.75)	.125 (3.18)	.063/.061 (1.60/1.55)	.400 (10.16)
20	Solder cup		.077 (1.96)	.042 (1.07)		.041/.039 (1.04/.99)	.330 (8.38)
20	Eyelet	.015 (0.38)		.042 (1.07)	.080 (2.03)	.041/.039 (1.04/0.99)	.330 (8.38)

Position	Shell size 8			Shell size 10			Shell sizes 12 thru 24		
	E°	F°	G°	E°	F°	G°	E°	F°	G°
Normal	60	180	300	60	180	300	50	170	290
6	46	166	286	46	166	286	50	170	290
7	46	166	286	46	166	286	50	170	290
8	60	180	300	60	180	300	50	170	290
9	89	209	329	89	209	329	50	170	290
Y				60	180	300	50	170	290

NOTES:

1. Dimensions in inches. Unless otherwise specified, tolerances-decimals $\pm .005$.
2. Metric equivalents are given for general information only.
3. All diameters to be concentric with each other within .015 T.I.R.
4. All diameters in the same plane to be concentric with each other with .004 T.I.R.
5. Contacts to be in accordance with SAE-AS39029. True position (T.P.) tolerances specified are for maximum material conditions (M.M.C).
6. For accessories used with this connector see procurement specification.
7. Thread relief groove is optional on shell. When groove is omitted the length of full thread from front of shell will be .310 minimum and thread runout .385 maximum.
8. For insert arrangements and alternate insert keying positions: See MIL-STD-1554.
9. Resilient face gasket only.

FIGURE 1. Receptacle, class H (hermetic) dimensions – Continued.

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Weight chart	
Maximum connector weight in pounds	
Pin insert	
MS PIN	Solder cup contacts
MS27034H8T2CN	
MS27034H10T2CN	.033 (0.84)
MS27034H10T5CN	.033 (0.84)
MS27034H10T20CN	.034 (0.86)
MS27034H12T3CN	.050 (1.27)
MS27034H12T12CN	.050 (1.27)
MS27034H14T3CN	
MS27034H14T4CN	.060 (1.52)
MS27034H14T7CN	.056 (1.42)
MS27034H14T12CN	
MS27034H14T15CN	.058 (1.47)
MS27034H16T10CN	
MS27034H16T24CN	.066 (1.68)
MS27034H18T8CN	.090 (2.29)
MS27034H18T11CN	
MS27034H18T14CN	.087 (2.21)
MS27034H18T31CN	.085 (2.16)
MS27034H20T16CN	
MS27034H20T25CN	
MS27034H20T28CN	
MS27034H20T39CN	
MS27034H20T41CN	
MS27034H22T12CN	
MS27034H22T19CN	.117 (2.97)
MS27034H22T32CN	
MS27034H22T55CN	.118 (3.00)
MS27034H24T43CN	
MS27034H24T57CN	
MS27034H24T61CN	

FIGURE 2. Receptacle, class H (hermetic) weights.

MS27034K

Weight chart	
Maximum connector weight in pounds	
Pin insert	
MS PIN	Eyelet contacts
MS27034H8T2EN	
MS27034H10T2EN	.032 (0.81)
MS27034H10T5EN	.032 (0.81)
MS27034H10T20EN	.033 (0.84)
MS27034H12T3EN	.050 (1.27)
MS27034H12T12EN	.049 (1.24)
MS27034H14T3EN	
MS27034H14T4EN	.059 (1.50)
MS27034H14T7EN	.055 (1.40)
MS27034H14T12EN	
MS27034H14T15EN	.057 (1.45)
MS27034H16T10EN	
MS27034H16T24EN	.065 (1.65)
MS27034H18T8EN	.090 (2.29)
MS27034H18T11EN	
MS27034H18T14EN	.086 (2.18)
MS27034H18T31EN	.082 (2.08)
MS27034H20T16EN	
MS27034H20T25EN	
MS27034H20T28EN	
MS27034H20T39EN	
MS27034H20T41EN	
MS27034H22T12EN	
MS27034H22T19EN	.115 (2.92)
MS27034H22T32EN	
MS27034H22T55EN	.115 (2.92)
MS27034H24T43EN	
MS27034H24T57EN	
MS27034H24T61EN	

Notes:

1. Dimensions are in inches.
2. Metric equivalent are given for information only.

FIGURE 2. Receptacle, class H (hermetic) weights – Continued.

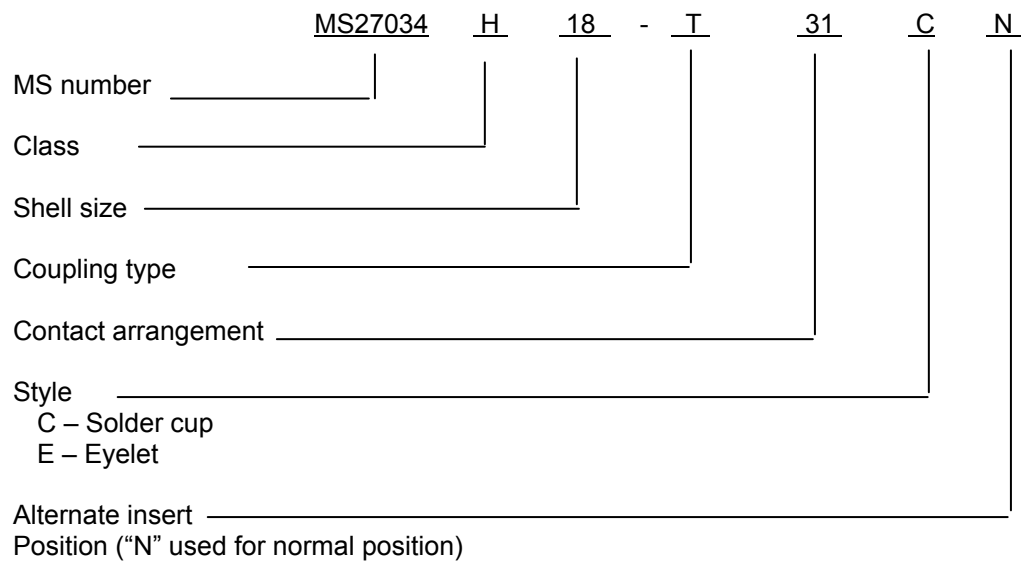
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REQUIREMENTS:

Dimensions and configuration: See figures 1 and 2.

Connector mating: This connector mates with MS24266 and MS27615.

Part or Identifying Number (PIN) example:



Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

Referenced documents. In addition to MIL-DTL-26500, this document references the following:

MIL-DTL-83723
SAE-AS39029
MIL-STD-1554
MS24266
MS27615

MS27034K

CONCLUDING MATERIAL

Custodians:

Air Force – 85

DLA – CC

Preparing activity:

DLA – CC

(Project 5935-2009-121)

Review activity:

Air Force – 99

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <http://assist.daps.dla.mil>.