INCH-POUND

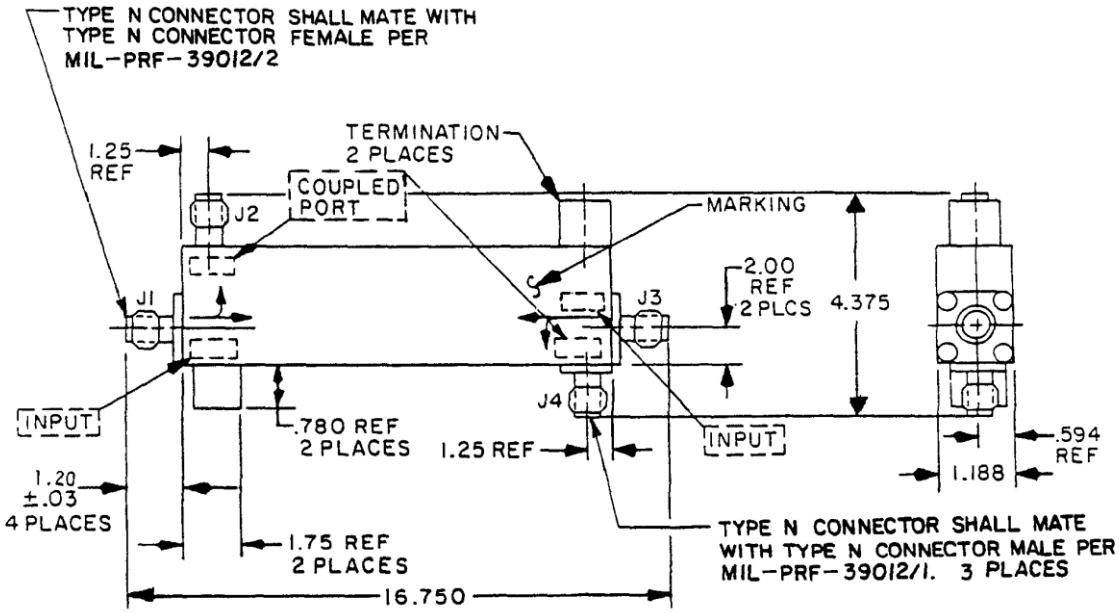
MIL-DTL-15370/11E
15 December 2015
SUPERSEDING
MIL-DTL-15370/11D
10 May 2004

DETAIL SPECIFICATION SHEET

COUPLERS, DIRECTIONAL DUAL (COAXIAL, SERIES N CONNECTORS)

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

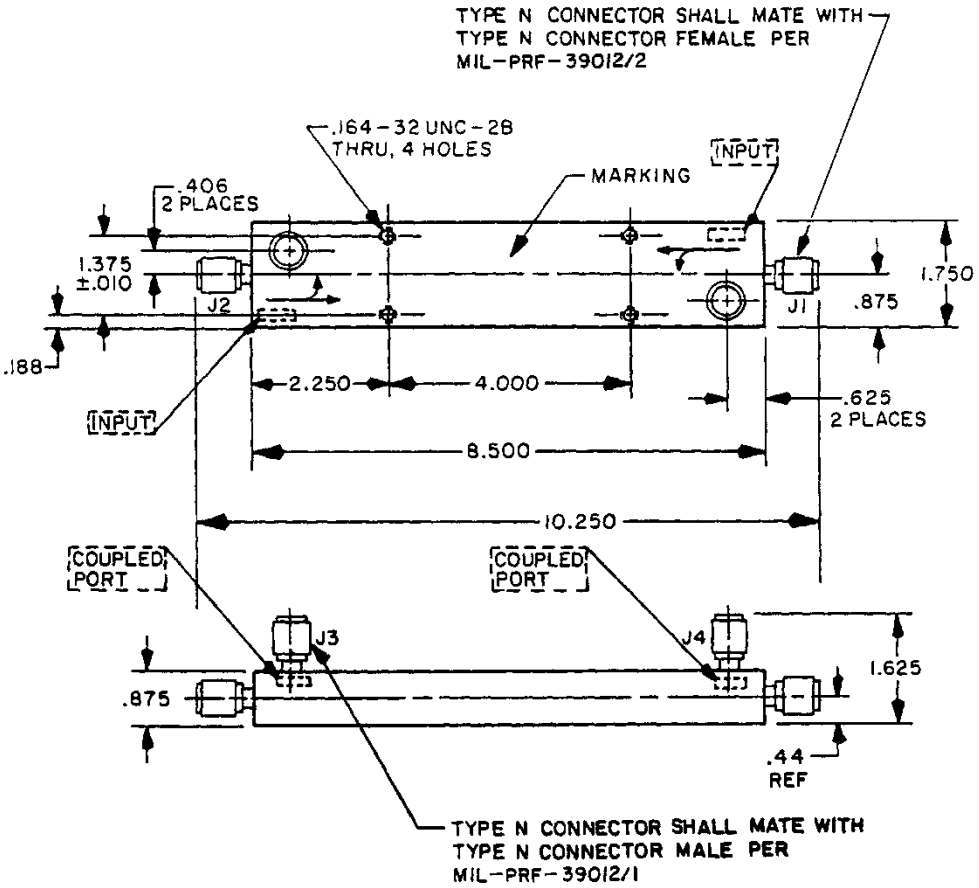
The requirements for acquiring the couplers described herein shall consist of this specification sheet and MIL-DTL-15370.



NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Unless otherwise specified, tolerance is ±.030 (0.76 mm).

Inches	mm
.03	0.8
.594	15.09
.780	19.81
1.188	30.18
1.20	30.5
1.25	31.8
1.75	44.5
2.00	50.8
4.375	111.12
16.750	425.45

FIGURE 1. Dimensions and configuration for part number M15370/11-001.



Inches	mm
.010	0.25
.164	4.17
.188	4.78
.406	10.31
.44	11.2
.625	15.88
.750	19.05
.875	22.22
1.375	34.92
1.625	41.28
1.750	44.45
2.250	57.15
4.000	101.60
8.500	215.90
10.250	260.35

NOTES:
1. Dimensions are in inches.
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3. Unless otherwise specified, tolerance is ±.030 (0.76 mm).

FIGURE 2. Dimensions and configuration for part number M15370/11-002.

TABLE I. Electrical requirements.

Dash No.	Frequency range	Coupling (dB)		Coupling variation (dB) max	Effective directivity (dB) max	Insertion loss (dB) max	VSWR max		RF input power to primary			Weight max
		Nominal	Tolerance				Primary line	Secondary line	Over frequency range	Avg	Peak	
	GHz											lbs
001	0.45 - 2.0 0.1 - 0.450	20 20 1/ (0.45 GHz)	± 0.5 (mean coupling) ---	± 1.5 (from nominal) ± 1.5 (from nominal)	Auxiliary output J2: 30 dB Auxiliary output J4: 36 dB, -0.1 - 1.0 GHz 32 dB, 1.0 - 2.0 GHz	0.6 0.6	1.10:1	1.10:1	50	50	10	4
002	4.0 - 8.0	20	±1	±1	25 dB	0.6	1.15:1	1.20:1	500	500	10	1.5

1/ Nominal coupling values increasing 0.006 dB/MHz for decreasing frequency, below 0.45 GHz.

REQUIREMENTS:

Design, construction and physical dimensions: See figures 1 and 2.

Connectors: Type N connectors, corrosion-resistant steel.

Operating temperature range: -20°C to +65°C.

Electrical: See table I.

Weight: See table I.

Auxiliary lines output to output amplitude equality (-001 only): 0.7 dB maximum.

Auxiliary output to output phase equality (-001 only): 4° maximum.

Shock: Not applicable.

Marking: See figures 1 and 2.

Part number: M15370/11-001 and M15370/11-002.

Referenced documents. In addition to MIL-DTL-15370, this specification sheet references the following documents: MIL-PRF-39012/1 and MIL-PRF-39012/2.

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