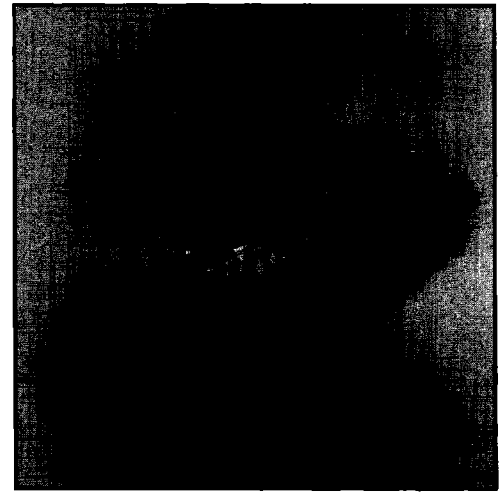


# REFLECTOMETER COUPLERS

- CEL3020A and 3022 Standards for Precision Reflectometry Measurements
- Each Model Calibrated Over Broad band
- High Directivity
- Extremely Low VSWR
- Ideal for Test and Laboratory Applications\*



\* See pages 8 and 9 for recommended transmitter system type models

## SPECIFICATIONS

APPLICATION	FREQ RANGE (MHz)	MODEL NO.	COUPLING dB	DIRECTIVITY (dB) (Min)	VSWR (Max)		EQUIVALENT RESIDUAL VSWR (Max)	ABSOLUTE CALIBRATION ACCURACY (Per 10 dB)	TRACKING dB	POWER AVERAGE (Watts)			CONN	WT Kg
					PRIMARY LINE	SECONDARY LINE				INCIDENT (Max)	REFLECTED (Max)	PEAK		
CELLULAR	800-980	CEL3020A	20±1.0	35	1.05	1.10	1.04	±0.1	0.3	500	500	10	N	1.1
PCS	1710-2200	CEL3022	20±1.0	30	1.08	1.15	1.09	±0.1	0.3	500	500	10	N	0.7

### Directional Couplers with Type "N" Connectors

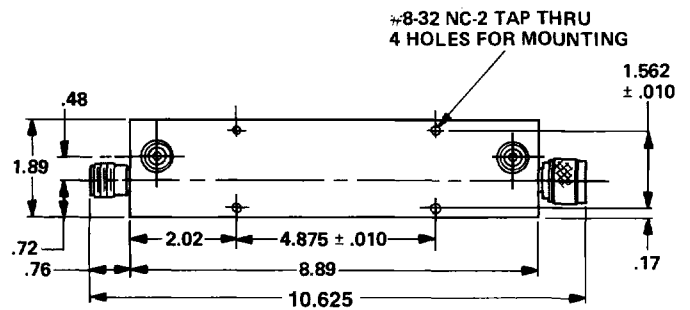
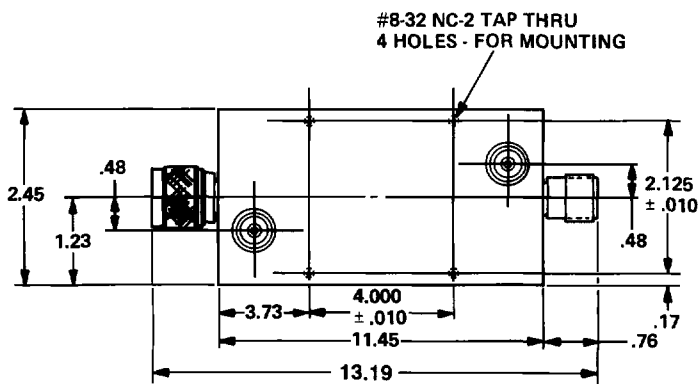
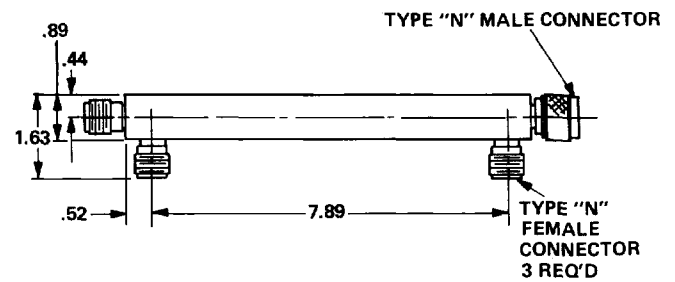
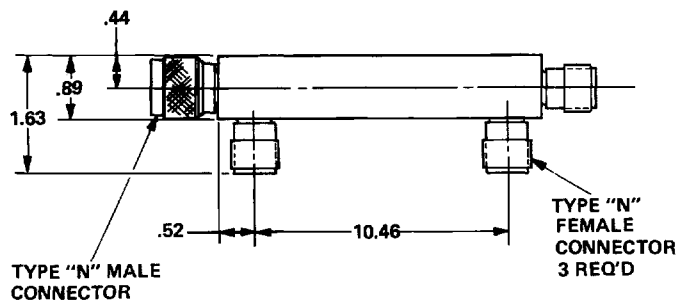
APPLICATION	FREQ RANGE (MHz)	MODEL NO.	COUPLING (dB)	DIRECTIVITY dB (Min)	TRUE INSERTION LOSS dB (Max)	VSWR		CALIBRATION FREQUENCIES (MHz)	ABSOLUTE CALIBRATION ACCURACY (Per 10 dB) dB	POWER AVERAGE (Watts)				WT Kg	
						PRIMARY LINE	SECONDARY LINE			INCIDENT (dB)		REFLECTED (dB)			PEAK
										10	20, 30	10	20, 30		
CELLULAR	800-950	CEL3001	10±0.1 20±0.1 30±0.1	30 30 32	0.70 0.22 0.20	1.05 1.07 1.05	1.15	460, 580, 700, 825, 950	±0.1	200	500	50	500	10	0.52
PCS	1710-2200	CEL3002	10±0.1 20±0.1 30±0.1	30 30 30	0.70 0.22 0.20	1.05 1.07 1.05	1.15	950, 1210, 1470, 1730, 2000	±0.1	200	500	50	500	10	0.52

### Directional Couplers with Type "N" Connectors

APPLICATION	FREQ RANGE (MHz)	MODEL NO.	COUPLING (dB)	DIRECTIVITY dB (Min)	TRUE INSERTION LOSS dB (Max)	VSWR (Max)		FREQ* SENSITIVITY dB (Max)	CALIBRATION FREQUENCIES (MHz)	ABSOLUTE CALIBRATION ACCURACY (Per 10 dB) dB	POWER AVERAGE (Watts)				WT Kg	
						PRIMARY LINE	SECONDARY LINE				INCIDENT (dB)		REFLECTED (dB)			PEAK
											10	20, 30	10	20, 30		
CELLULAR	800-980	CEL3041	10±0.5 20±0.5 30±0.5	25 20 27.5	0.70 0.22 0.20	1.08 1.10 1.08	1.20	±0.1 ±0.2 ±0.2	500, 625, 750, 875	±0.1	200	500	50	500	10	0.9
PCS	1710-2200	CEL3042B	10±0.5 20±0.5 30±0.5	25 20 27.5	0.70 0.22 0.20	1.08 1.10 1.08	1.20	±0.1 ±0.2 ±0.2	920, 1240, 1500, 1880, 2200	±0.1	200	500	50	500	10	0.6

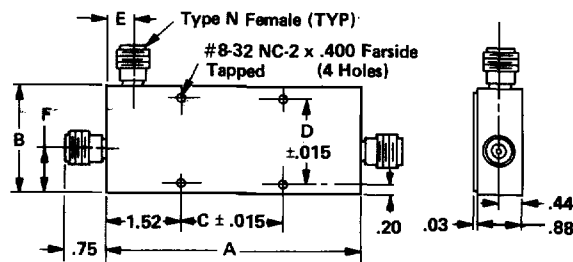
\*Frequency sensitivity is included in coupling variation

# OUTLINE DRAWINGS



**CEL3020A**

**CEL3022**



**MODEL CEL3001, CEL3002, CEL3041B, CEL3042B**

Model No.	A	B	C	D	E
CEL3001-10 & 20	6.25	2.13	3.000	.51	.87
CEL3001-30	6.25	2.13	3.000	.51	.69
CEL3002-10, -20	4.10	2.13	1.090	.51	.87
CEL3002-30	4.10	2.13	1.090	.52	.69
CEL3041B-10,-20	10.08	2.12	3.000	.50	.86
CEL3041B-30	10.08	2.12	3.000	.50	.68
CEL3042B-10, -20	6.12	2.12	3.000	.50	.86
CEL3042B-30	6.12	2.12	3.000	.50	.68