

# Calibrated Frequency Meters

## Series 070

### Features

- High Accuracy
- High Q
- Full Band

In designing a satisfactory frequency meter cavity, great care must be used in the selection of the operating mode of resonance, the diameter and the coupling elements in order that non-ambiguous operation is achieved over the full waveguide band.

The Flann Series 070 Frequency Meters consist of a high Q electroformed precision cavity located on the rectangular waveguide narrow wall. The cavity operates in the TE<sub>111</sub> mode and is tuned by a non-contacting choked piston. All models have a minimum tuned response of 1 dB. A micrometer drive ensures precise control of the piston position enabling frequency measurement to a high accuracy. Each instrument is supplied with calibration data.



Model 17070

**ORDERING INFORMATION**  
 Model: Description  
 Example: Model 22070 Calibrated frequency meter

Series 070

Model	Frequency Range (GHz)	Waveguide			Calibrated Accuracy (%)	Typical Loaded Q	Dimensions (mm)			Model
		WG	W	WR			A	B	C	
<b>14070</b>	5.38 - 8.18	14	70	137	0.010	7000	110	63	173	<b>14070</b>
<b>15070</b>	6.58 - 10.0	15	84	112	0.010	6300	102	63	161	<b>15070</b>
<b>16070</b>	8.20 - 12.5	16	100	90	0.010	5500	90	50	125	<b>16070</b>
<b>17070</b>	9.84 - 15.0	17	120	75	0.010	5200	90	50	111	<b>17070</b>
<b>18070</b>	11.9 - 18.0	18	140	62	0.012	4700	90	50	107	<b>18070</b>
<b>19070</b>	14.5 - 22.0	19	180	51	0.012	4200	90	50	104	<b>19070</b>
<b>20070</b>	17.6 - 26.7	20	220	42	0.012	3700	90	50	101	<b>20070</b>
<b>22070</b>	26.4 - 40.1	22	320	28	0.025	3000	70	50	122	<b>22070</b>
<b>23070</b>	33.0 - 50.1	23	400	22	0.025	2800	60	50	113	<b>23070</b>
<b>24070</b>	39.3 - 59.7	24	500	19	0.030	2300	60	50	104	<b>24070</b>
<b>25070</b>	49.9 - 75.8	25	620	15	0.035	2100	60	50	103	<b>25070</b>
<b>26070</b>	60.5 - 92.0	26	740	12	0.035	1800	60	50	105	<b>26070</b>
<b>27070</b>	73.8 - 112.0	27	900	10	0.050	1600	60	50	101	<b>27070</b>
<b>28070</b>	92.0 - 140	28	1200	8	0.080	1200	60	50	95	<b>28070</b>

For standard flange types and recommendations see pages 108 onwards