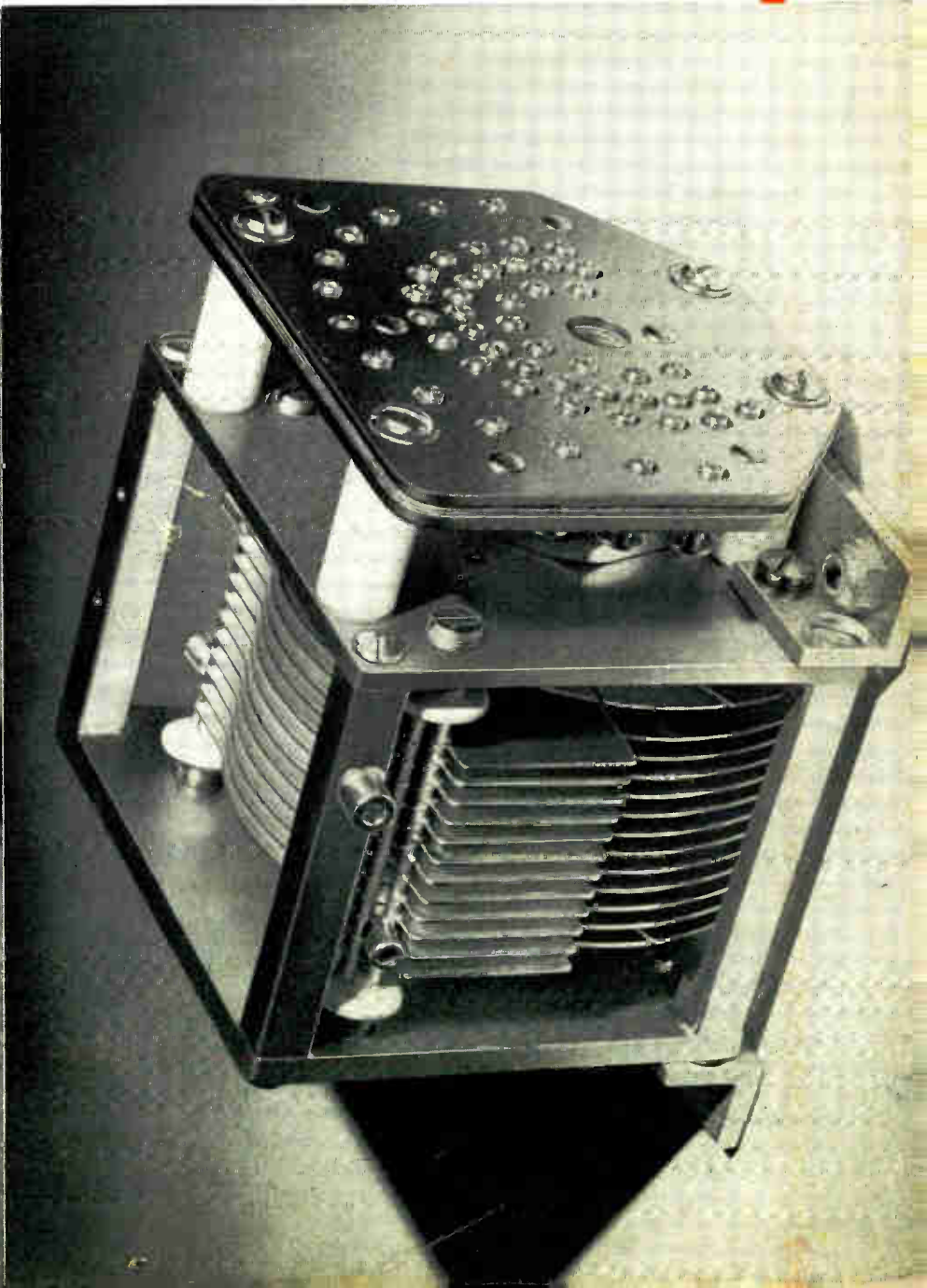
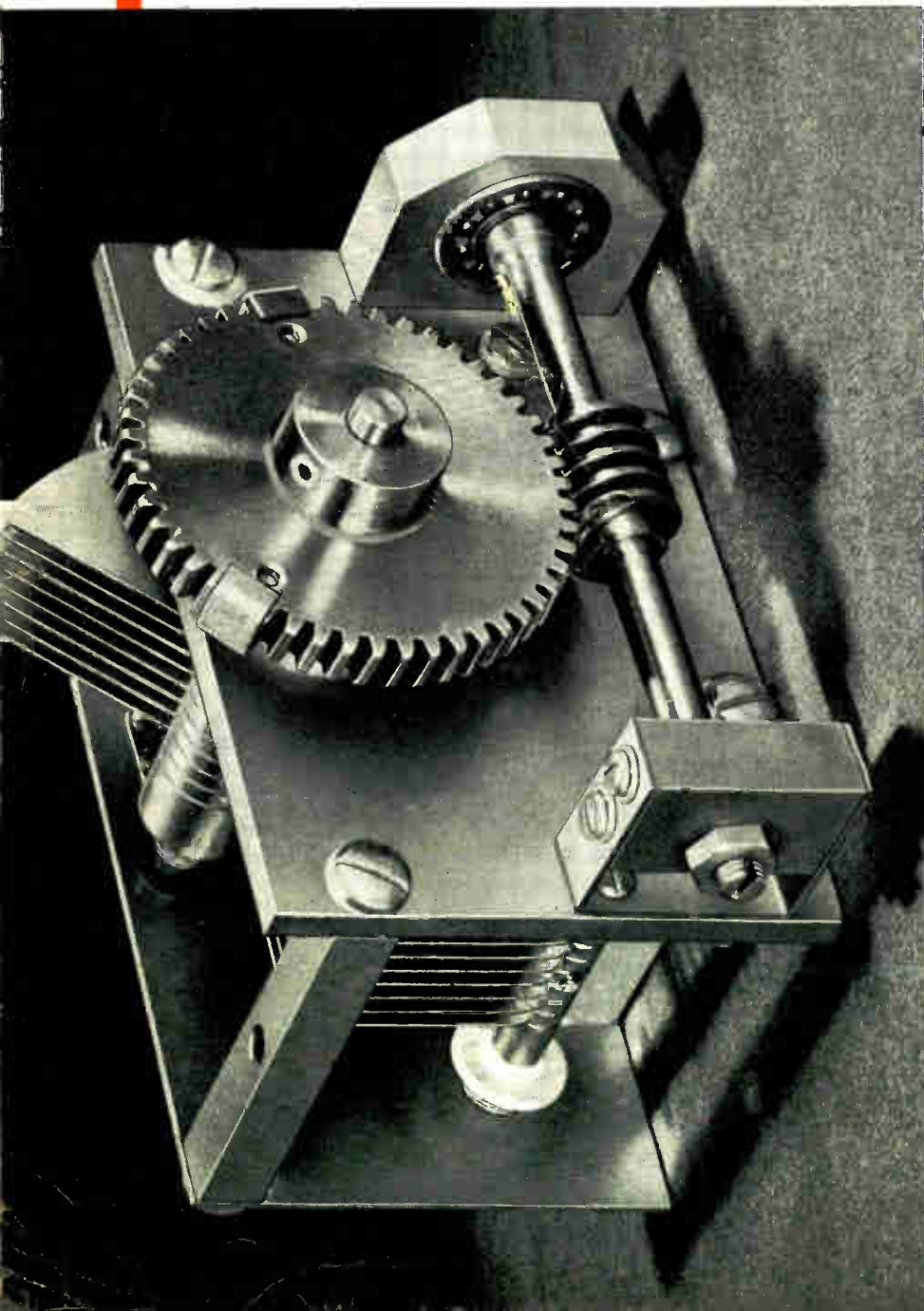




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THE HAMMARLUND '46' CATALOG

HAMMARLUND MANUFACTURING COMPANY, INC.
Factory & Main Offices: 460 West 34th Street, New York

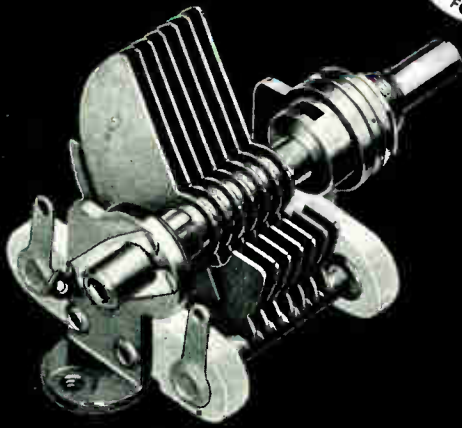


THE Hammarlund Manufacturing Company had its beginning in a small shop on Fulton Street in the downtown section of New York City, back in 1910. During the years that followed and through two great wars, we at Hammarlund have been constantly striving to serve our country and the radio industry through the development and manufacture of precision communications components and equipment. We specialize principally in two products—Variable Capacitors and Communications Equipment. This Capacitor Catalog contains illustrations and technical data on our standard line of capacitors. In addition to those illustrated, we manufacture in large volume hundreds of special capacitors for use in commercial and military equipment. Two such units are illustrated on the opposite page. We invite inquiries from manufacturers and laboratories regarding capacitor problems.

L. W. B. Hammarlund
PRESIDENT



"MC" MIDGET CONDENSERS



'MC' MIDGET CONDENSER

THIRTY years ago, the first HAMMARLUND variable condensers made their appearance. Their dominant superiority became a by-word in laboratories, schools and homes the world over. Today, specialists continue to show their approval of HAMMARLUND condensers by continually specifying them for use in every conceivable type of radio instrument.

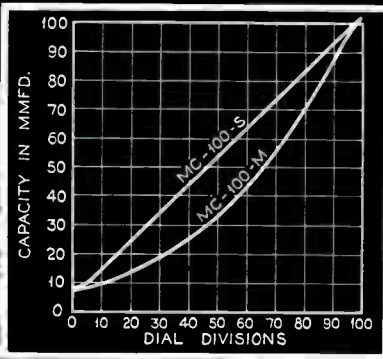
Among the more prominent users of HAMMARLUND products are: General Electric, Westinghouse, R.C.A., Western Electric, Bell Laboratories, U. S. Army, Navy, Coast Guard, Forestry Service, Bureau of Standards, Stromberg-Carlson, Philco, etc. Every HAMMARLUND condenser is designed for peak electrical and mechanical performance. Wide capacity ratios, vibration-proof construction, light weight, quality insulation, selected metals—all with an eye to dependable trouble-free long lasting service.

In high frequency work with frequencies running up to 50 and 60 megacycles, unusual condenser efficiency is demanded. Every detail of HAMMARLUND condensers can be depended on to more than meet these severe demands. The "MC" series uses Isolantite insulation placed outside of electrostatic fields to reduce dielectric losses to minimum and to insure maximum and uniform efficiency under all conditions of temperature and humidity. A wide split-type rear bearing and a wide special bearing at the front provide for perfect contact without objectionable inductive reactance. The type, size and accuracy of these bearings assure long life, quiet operation, and absolute stability of calibration. In addition, a new noiseless silver-plated Beryllium wiping contact is also included in the rear. Thus, strictly noise-free results are assured. Cadmium plated non-corrosive soldered brass plates reduce vibration and effect lowest series resistance.

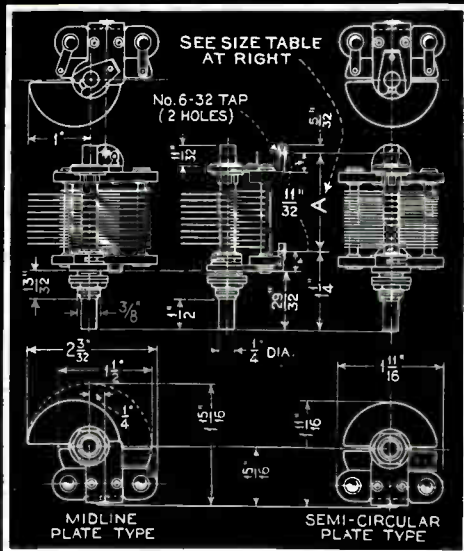
Greater strength and rigidity are secured through elimination of all screws and nuts—everything being either soldered or riveted. End plates of heavy aluminum. Single hole panel mounting or base mounting.

Because of their vibration-proof construction, these condensers are ideally suited to aircraft, police car, and marine work, as well as for broadcast tuning, wave traps, compensating and vernier condensers, regeneration and neutralizer condensers and for laboratory and test equipment in general.

General Specifications—Plates are .0225" thick with .0245" air gap. Shafts are 1/4" diameter extending 5/16" beyond rear frame to facilitate ganging. Standard condensers include stops and are made to increase capacity by clockwise rotation. Individually tested for breakdown on 1000 V. R.M.S. 60 cycles. Quality fully guaranteed. See drawing and table below for dimensions, plates, etc. At left are typical capacity curves.



SPECIAL condensers can be supplied to order. These include condensers of special capacities, spacing, rotation, and shaft extensions; also locking type condensers for fixed frequency work, split stator, balancing condensers, extra compact condensers, etc.



LIST OF STOCK SIZES

Code	MMFD CAPACITY*		No. Plates	Dimension "A"	List Price
	Max. Cap.	Min. Cap.			
MC-325-M	320.	13.5	43	2 23/32"	\$4.90
MC-250-M	250.	12.	34	2 5/16"	4.50
MC-200-M	200.	10.3	27	2"	4.30
MC-140-M	140.	9.	19	1 19/32"	3.90
MC-140-S	140.	10.	19	1 19/32"	3.90
MC-100-M	100.	7.7	14	1 13/32"	3.60
MC-100-S	100.	8.3	14	1 13/32"	3.60
MC-75-M	80.	7.3	11	1 7/32"	3.40
MC-75-S	80.	8.0	11	1 7/32"	3.40
MC-50-M	50.	6.3	7	1 7/32"	3.20
MC-50-S	50.	6.5	7	1 7/32"	3.20
MC-35-S	35.	6.	5	1 7/32"	3.10
MC-20-S	20.	5.5	3	1 7/32"	3.00

*MMFD Capacities are specified as nominal values

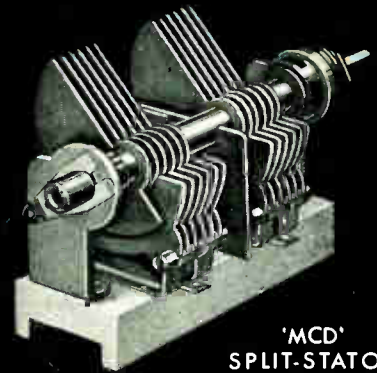
Prices subject to change without notice.

"MCD" SPLIT-STATOR CONDENSERS

Like HAMMARLUND single midgets, these duals incorporate rigidity, low losses, and careful construction—every requirement imperative to highest mechanical and electrical efficiency. Entire condenser built on strong Isolantite base including shield plate between stators. Cadmium plated soldered brass plates. New split type rear bearing and noiseless wiping contact of silver plated Beryllium. Single hole panel mount. Other specifications same as for "MC" single midgets.

Code	MMFD. CAP. PER SEC.*		Plates Per Sec.	Length Behind Panel	List Price
	Max.	Min.			
MCD-50-M	50.	5.5	7	3 3/8"	\$6.00
MCD-100-M	100.	6.3	14	3 3/8"	6.50
MCD-100-S	100.	7.	14	3 3/8"	6.50
MCD-140-M	140.	7.8	19	3 3/8"	7.00

*MMFD. Capacities are specified as nominal values.
Voltage breakdown test: 1000 V. R.M.S., 60 cycles



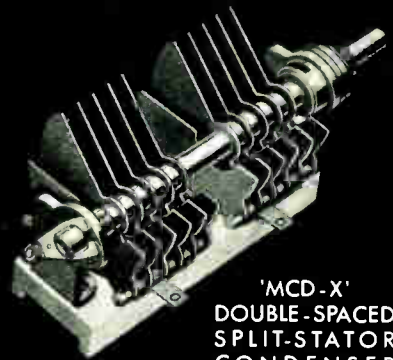
'MCD'
SPLIT-STATOR
CONDENSER

"MCD-X" DOUBLE-SPACED CONDENSERS

This condenser is specially designed for ultra-high frequency work and laboratory use, for either transmitting or receiving. Wide spacing between plates aids frequency stability. Isolantite insulation. New split type rear bearing and noiseless wiping contact. Cadmium plated non-corrosive soldered brass plates. Actual air gap between plates .0715".

Code	MMFD. CAP. PER SEC.*		Plates Per Sec.	Length Behind Panel	List Price
	Max.	Min.			
MCD-35-MX	31.	6.0	11	3 3/8"	\$6.80
MCD-35-SX	31.	6.8	11	3 3/8"	6.80

*MMFD. Capacities are specified as nominal values.
Voltage breakdown test: 1750 V. R.M.S., 60 cycles.



'MCD-X'
DOUBLE-SPACED
SPLIT-STATOR
CONDENSER

"MC-X" DOUBLE-SPACED CONDENSERS

An excellent variable condenser for ultra-high frequency receivers and transmitters, particularly compact transmitters. Plates are widely spaced—air gap between plates .0715". New split type rear bearing and noiseless wiping contact. Cadmium plated soldered brass plates. Isolantite insulation.

Code	MMFD. CAPACITY*		No. Plates	Dimension "A"***	List Price
	Max.	Min.			
MC-20-MX	20.	6.5	7	1 13/32"	\$3.40
MC-20-SX	20.	6.8	7	1 13/32"	3.40
MC-35-MX	32.	7.8	11	1 19/32"	3.70
MC-35-SX	32.	8.5	11	1 19/32"	3.70
MC-50-MX	53.	10.5	19	2 5/16"	4.20
MC-50-SX	53.	11.5	19	2 5/16"	4.20
MC-100-SX	100.	16.5	35	3 29/32"	4.90

Voltage breakdown test: 1750 V. R.M.S., 60 cycles.
*MMFD. Capacities are specified as nominal values.
**Refer to MC outline.



'MC-X'
DOUBLE-SPACED
CONDENSER

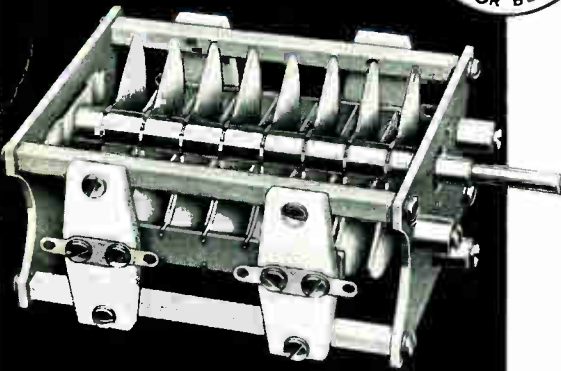
Prices subject to change without notice.



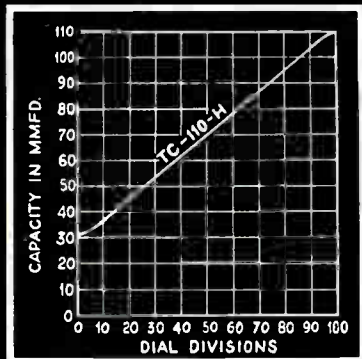
"TC" TRANSMITTING CONDENSERS

THIS new and complete line of "TC" transmitting condensers was recently developed in the HAMMARLUND laboratories. Many outstanding features incorporated in these new condensers are the result of years of careful research in both mechanical and electrical design of variable capacitors. Heavy aluminum end plates for maximum strength are tied together with four 5/16" duraluminum pillars. Both rotor and stator plates are carefully buffed and polished and have rounded edges in order to minimize danger of flash-over. The rotor assembly, which embodies the non-magnetic principle, is an exclusive HAMMARLUND feature. The rotor plates are carefully staked to a non-magnetic shaft. The stainless steel dial shaft does not pass through the rotor assembly. All magnetic material is kept out of the direct field of the condenser—something which is absolutely necessary for the maximum efficiency at high frequency. Special hand fitted full-floating bearings eliminate binding and twisting. The rotor contacts are heavy silver plated Beryllium wipers and of sufficient area to eliminate contact losses. This contact is direct to the rotor shaft and extends through the rear plate of the condenser for soldering. Thus, we do not depend upon metal to metal contacts through the framework. Neither do we depend upon the stainless steel rear ball bearing for electrical contact. This shortens the electrical path and greatly increases efficiency.

General Specifications: Peak voltage ratings for the various types are: 6750 V. type "G"; 6000 V. type "H"; 4250 V. type "J"; 3750 V. type "K"; 2000 V. type "L". Shaft is 1/8" diameter stainless steel. Isolantite insulation through-out, specially treated against moisture absorption. Three panel mounting bushings for 8-32 screws and also special mounting feet for base or stand-off insulator mounting are packed with each condenser. See drawing and table below for dimensions, plates, air gap, etc.



'TC' TRANSMITTING
CONDENSER



CONDENSERS of special capacities or plate spacing can be supplied to order. Condensers can also be supplied to meet special mounting requirements or equipped with such accessories as rotor locking devices, Isolantite mounting bushings, etc.

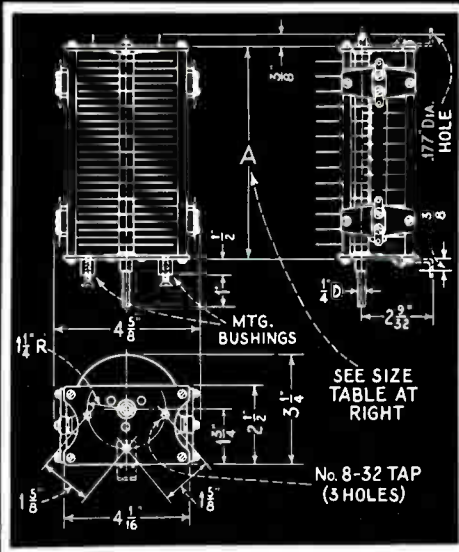
LIST OF STOCK SIZES

Code	MMFD. Capacity*		Plate** Spacing	PLATES			Dimension "A"	List Price
	Max.	Min.		No.	Thickness	Edges		
TC-100-G	110	32	.200"	25	.040"	Rounded	6 5/8"	\$11.30
TC-50-H	53	15	.171"	11	.040"	Rounded	3 3/16"	7.65
TC-110-H	115	28.5	.171"	23	.040"	Rounded	5 5/8"	11.50
TC-240-J	250	31	.100"	33	.040"	Rounded	5 5/8"	13.00
TC-220K	222	24.5	.081"	25	.040"	Rounded	3 3/4"	10.25
TC-440-L	465	32.5	.070"	43	.025"	Plain	5"	11.65

Peak voltage ratings: "G"—6750
 "H"—6000
 "J"—4250
 "K"—3750
 "L"—2000

*MMFD Capacities are specified as nominal values.
 **Plate spacings are specified as nominal values.

Prices subject to change without notice.



"MTC" TRANSMITTING CONDENSERS

A NEW popular series of transmitting condensers for high frequency and very-high frequency medium and low powered units. The construction of these condensers is so rugged that even real rough handling will not damage them. Though low in price, these condensers include all constructional features necessary in quality transmitters of all kinds. High operating efficiency has been attained by extensive research in materials and design plus careful workmanship.

Construction is similar to the large "TC" type described on the opposite page; the end frames are of heavy aluminum sheet. Plates are of aluminum. Rotor plates are firmly anchored in place by wedging them into deep slots and then by further staking them. The same construction is employed in the stators. An accurately ground stainless steel shaft is carefully fitted to a long bronze front bearing mounted on a Beryllium cushion disc. The free-floating action thus afforded provides for consistently smooth operation and also provides a perfect bearing. The rear bearing is of the steel ball and cup type. Isolantite insulation and silver-plated Beryllium contact wiper assure lowest losses and lowest series resistance. Noiseless operation and complete stability are guaranteed under all conditions of use. All sizes may be either panel or base mounted.

Recommended generally for medium power applications. Small size and light weight specially recommend their use in apparatus where size and weight are of importance such as in airplane and other mobile or portable units. Both receiver and transmitter requirements are provided for by a wide range of capacities and plate spacings.

General Specifications—Peak voltage ratings are: 3000 V. for "B" types, and 1200 V. for "C" types. Lock washers are used under all screws. Base mounting brackets and three panel mounting bushings and No. 6-32 screws are packed with each condenser. For protection, condensers are individually packed in specially designed corrugated cartons. See drawing and table for all dimensions.

A SEPARATE department is maintained for the design, development and construction of condensers of special capacities, plate spacings, rotor locking devices, special types of mountings, etc.

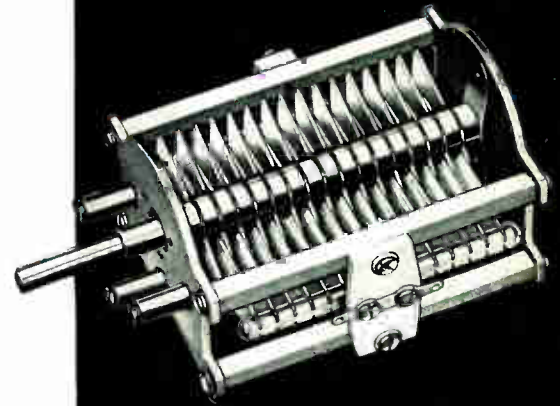
LIST OF STOCK SIZES

Code	MMFD. Capacity*		Plate** Spacing	PLATES			Dimension "A"	List Price
	Max.	Min.		No.	Thick-ness	Edges		
MTC-20-B	22	7	.070"	5	.025"	Rounded	1 7/8"	\$6.75
MTC-100-B	100	15	.070"	21	.025"	Rounded	2 7/8"	8.75
MTC-150-B	150	19.5	.070"	31	.025"	Rounded	3 7/8"	9.75
MTC-250-C	255	13.5	.031"	25	.025"	Plain	2 7/8"	7.75
MTC-350-C	360	17.5	.031"	35	.025"	Plain	2 7/8"	8.00

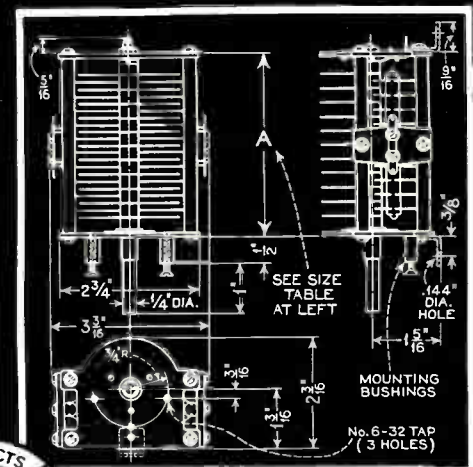
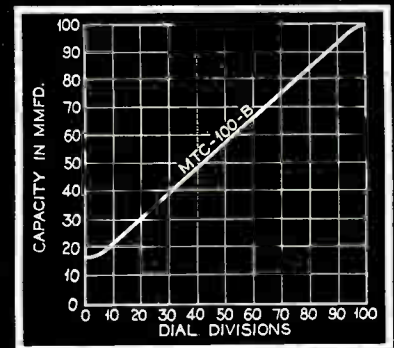
*MMFD Capacities are specified as nominal values.

**Plate spacings are specified as nominal values.

Prices subject to change without notice.

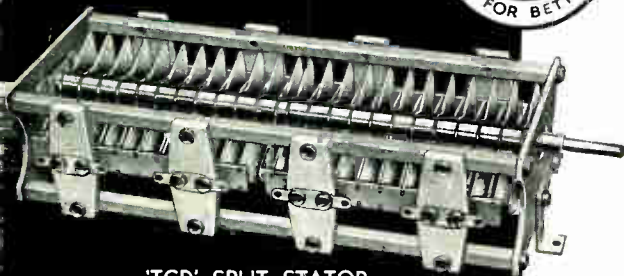


MTC TRANSMITTING CONDENSER

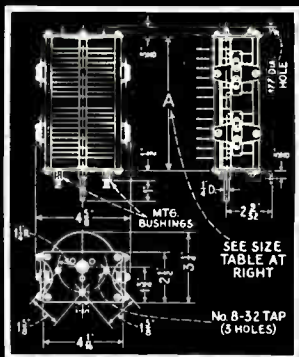




"TCD" TRANSMITTING CONDENSERS



"TCD" SPLIT-STATOR
TRANSMITTING
CONDENSER



HAMMARLUND "TCD" split stator transmitting condensers are identical in quality and have the same features found in the "TC" single transmitting condensers. These condensers, while available with wide plate spacing and high capacities, are still within bounds insofar as physical dimensions are concerned and lend themselves readily in the design of modern, compact apparatus. For complete details as to general construction and specifications, see page 6. The following split stator types have all four horizontal tie pillars drilled and tapped to accommodate brackets for mounting the neutralizing condensers and tank coil directly on the tuning condenser: "TCD-50-II" and "TCD-100-II". This feature greatly facilitates construction of the amplifier in which the condenser is used, making a more compact and symmetrical layout.

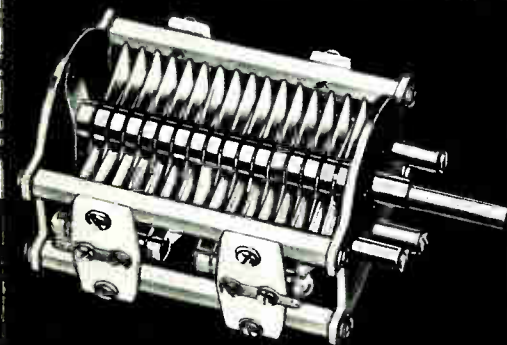
Code	MMFD. CAP. PER SEC.*		Plate** Spac- ing	PLATES			Dimen- sion "A"	List Price
	Max.	Min.		Per Sec.	Thick- ness	Edges		
TCD-110-II	115	29	.171"	23	.040"	Rounded	10 3/16"	\$20.50
TCD-240-J	250	32	.100"	33	.040"	Rounded	10 3/16"	24.50
TCD-325-K	335	32.5	.084"	37	.040"	Rounded	10 3/16"	26.15
TCD-210-L	215	18.5	.070"	21	.025"	Plain	5"	13.35
TCD-500-M	490	17.5	.030"	21	.025"	Plain	3 3/16"	13.20

Peak voltage ratings: "H"—6000
 "J"—4250
 "K"—3750
 "L"—2000
 "M"—1000

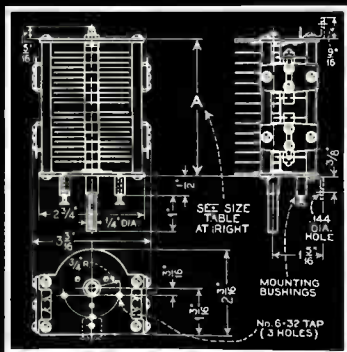
*MMFD Capacities are specified as nominal values.
 **Plate spacings are specified as nominal values.

"MTC-D" TRANSMITTING CONDENSERS

These split-stator condensers have the same characteristics and the same constructional features as the "MTC" singles. Unusually compact and light in weight. Ideal for portable transmitters. Overspaced plates securely held in place. Isolantite insulation. Quality bearings. Noiseless wiping contacts. Provides the same operating advantages outlined in the above description of "TCD" type condensers. See drawing and table for dimensions, plates, air-gaps, etc.



"MTC-D" SPLIT-STATOR
TRANSMITTING
CONDENSER



Code	MMFD. CAP. PER SEC.*		Plate** Spac- ing	PLATES			Dimen- sion "A"	List Price
	Max.	Min.		Per Sec.	Thick- ness	Edges		
MTC-D-20-B	22	6.5	.070"	5	.025"	Rounded	2 7/8"	\$ 8.75
MTC-D-35-B	33	7.5	.070"	7	.025"	Rounded	2 7/8"	10.00
MTC-D-100-B	100	14.5	.070"	21	.025"	Rounded	5"	12.50

Peak voltage rating: "B"—3000

*MMFD Capacities are specified as nominal values.
 **Plate spacings are specified as nominal values.

Prices subject to change without notice.

"HFA" AND "HFB" CONDENSERS

THIS new line of transmitting and receiving condensers departs considerably from the usual condenser design. All parts are brass, cadmium plated, and soldered resulting in a compact, rugged unit. Isolantite end plates insulate the rotor assembly from the mounting brackets. All "HFB" models have insulated control shafts especially designed for circuits where the high voltage is connected directly to the rotor. This permits higher tube voltages for a given condenser plate spacing and results in a less expensive, more compact unit. It also provides greater personal safety to the operator. The "HFAD" units are the same in construction as the "HFBD" except that smaller plates are used and the control shaft is not insulated. They are ideal for low power portable transmitters and receivers. "HFAD" like the "HFBD" has opposed rotors and stators for perfect counter-balancing. The "HFA" is a single unit having only one Isolantite end plate. The 100% soldered construction of both the "HFA" and "HFB" types eliminates the danger of losses due to high resistance contacts. Both "HFA" and "HFB" types are available to manufacturers with special shaft lengths. Stator mounts at top, not as illustrated. Inquiries are invited.

General Specifications—All shafts are $\frac{1}{8}$ " in diameter. All plates are semi-circular and all rear bearings are single ball thrust. Types "HFB" and "HFBD" have $1\frac{3}{8}$ " shaft extensions; .025" plates thickness; $1-13/16$ " square Isolantite end plates. Type "HFA" has $9/16$ " shaft extension, $1-13/32$ " x $1-1/32$ " Isolantite end panel, .020" plate thickness. "HFAD" has $1\frac{3}{8}$ " square front and rear Isolantite panels, $9/16$ " shaft extension, .020" plate thickness. All "B" types have base mounting brackets. "HFA" and "HFAD" have additional single hole mounting feature.

HFA—HFAD

Code	MMFD. Capacity*		Plate** Spacing	PLATES		Dimension*** "A"	List Price
	Max.	Min.		No.	Edges		
HFA-100-A	102.	4.5	.020"	19	Plain	1 13/32"	\$3.30
HFA-140-A	145.	6.0	.020"	27	Plain	1 23/32"	3.85
HFA-10-B	9.	2.3	.030"	3	Plain	25/32"	2.55
HFA-15-B	16.	2.8	.030"	5	Plain	7/8"	2.70
HFA-25-B	25.	3.0	.030"	7	Plain	31/32"	2.80
HFA-50-B	50.	4.3	.030"	14	Plain	1 3/8"	3.10
HFA-100-B	100.	7.5	.030"	27	Plain	2 11/32"	4.10
HFA-15-E	16.	4.	.070"	9	Plain	1 3/8"	2.80
HFAD-25-B	25.0	6.3	.030"	7	Plain	1 29/32"	6.00

Plates: .020" thick

Voltage breakdown test: "A"—800 V. R.M.S., 60 cycles.

"B"—1200 V. R.M.S., 60 cycles.

"E"—1750 V. R.M.S., 60 cycles.

***Dimension "A" is overall mounting length behind panel.

HFB

Code	MMFD. Capacity*		Plate** Spacing	PLATES		Dimension*** "A"	List Price
	Max.	Min.		No.	Edges		
HFB-50-C	48.0	7.5	.050"	11	Plain	1 7/8"	\$7.00

Plates: .025" thick.

Peak voltage rating: "C"—1500.

HFBD

Code	MMFD. CAP. PER		Plate** Spacing	Per Sec.	Edges	Dimension*** "A"	List Price
	Max.	Min.					
HFBD-50-C	50.	9.	.050"	11	Plain	2 7/8"	\$ 9.00
HFBD-100-C	105.	14.	.050"	23	Plain	4 5/8"	10.60
HFBD-35-E	37.	9.5	.070"	11	Rounded	3 1/4"	7.95
HFBD-65-E	63.	12.5	.070"	19	Rounded	4 13/16"	9.10

Plates: .025" thick.

Peak voltage rating: "C"—1500.

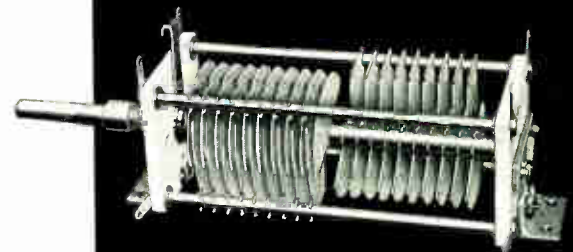
"E"—3000.

*MMFD. Capacities are specified as nominal values.

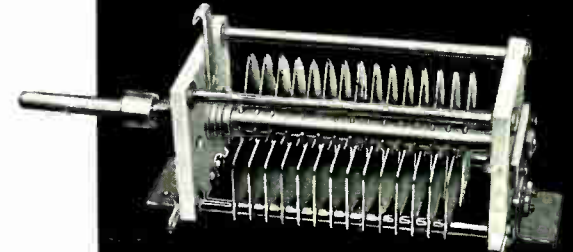
**Plate spacings are specified as nominal values.

***Dimension "A" is the overall of panels length.

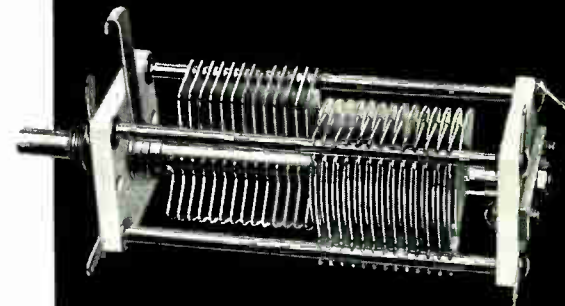
Prices subject to change without notice.



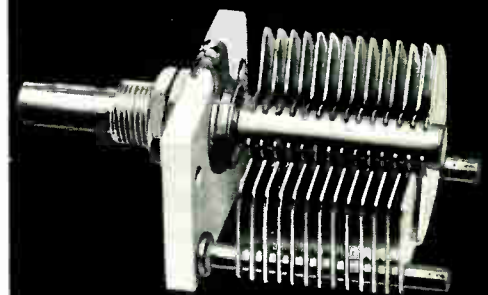
'HFB' SPLIT-STATOR TRANSMITTING CONDENSER



'HFB' TRANSMITTING CONDENSER

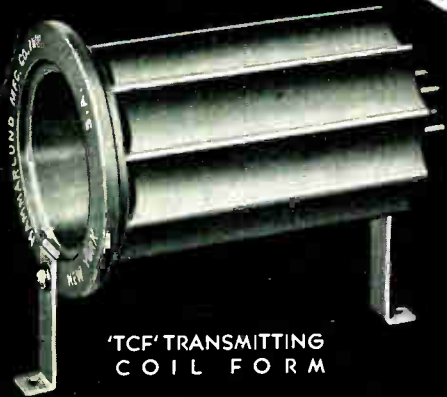


'HFA' SPLIT-STATOR CONDENSER



'HFA' MIDGET CONDENSER





'TCF' TRANSMITTING COIL FORM



'N-10' NEUTRALIZING CONDENSER



'UHS-900' ACORN SOCKET



'RFC' RF CHOKE

"TCF" TRANSMITTING COIL FORMS

These new giant forms are made of low loss XP-53 dielectric. Forms are groove ribbed to permit air spaced windings. Substantial flange grips for easy handling are another feature. The form may be base mounted by means of a special pair of brackets supplied with each form or mounted in the familiar plug-in coil fashion in the regulation socket. The winding diameter of the form is 2 1/4". Overall length is 3 7/8" exclusive of prongs.

Code	Prongs	List Price
TCF-4	4	Discontinued
TCF-5	5	Discontinued

NEUTRALIZING CONDENSERS

A new type high voltage neutralizing condenser, offering the advantages of horizontal adjustment and generally improved both mechanically and electrically. Thick aluminum plates with rounded edges and polished on all surfaces. An oversized fine thread screw provides smooth micrometer adjustment. Lock nut permits permanent setting and a stop prevents shorting—plates can not touch. Special base construction prevents pivoting and insures permanent plate alignment. Isolantite insulation. Overall size: N-10, 2 5/8" high x 1 3/16" deep; N-20, 5 1/16" high x 4" deep.

Code	MMFD CAPACITY*		Plate Spacing	Peak Voltage Rating	List Price
	Max.	Min.			
N-10	10.	2.3	1/16"-11/16"	3000 at min. gap	Disc.
N-20	14.	3.8	1/4"-2 1/8"	7500 at min. gap	Disc.

*MMFD. Capacities are specified as nominal values.

"UHS-900" ACORN SOCKETS

This new HAMMARLUND acorn socket, "UHS-900", has many advantages. It has positive locking contacts permitting the tube to be mounted in any position without the danger of it becoming loose. The contacts are silver plated Beryllium firmly anchored to the base, so that they can not shift. The base of the "UHS-900" is made of super Isolantite, called "ISO-Q" and results in lower losses. In addition to superior design, the "UHS-900" has a metal shield which completes the internal shielding of screen grid type acorn tubes, reducing coupling between input and output circuits. In addition to all these advantages, this socket is more compact. Base diameter is 1 3/16". Mounting centers 1 3/16".

Code	Prongs	List Price
UHS-900	5	\$1.10

"RFC" HIGH IMPEDANCE CHOKES

These chokes have been standard in the industry for years. A special process of winding and impregnating provides a very large inductance with a very low distributed capacity, making them very effective in both broadcast and SW receivers. Bakelite case is 1 13/16" high x 1 3/16" diameter.

Code	Inductance	D.C. Res.	Dist. Cap.	Current Cap.	List Price
RFC-85	85 mh.	215 ohms	3 mmf.	60 ma.	Disc.
RFC-250	250 mh.	120 ohms	2 mmf.	60 ma.	Disc.

Prices subject to change without notice.

"APC" MICRO CONDENSERS

High quality, air dielectric condensers for use wherever space is at a premium. Ideal as air dielectric trimmers for gang condensers, I. F. transformers and for padding r. f. circuits. Isolantite base. Cadmium plated soldered brass rotors and stators. Screw driver adjustment.

Code	MMFD. CAPACITY*		No. Plates	Dimension "A"	List Price
	Max.	Min.			
APC-25	23.	4.	7	21 64"	\$1.70
APC-50	50.	5.	14	1 1/2"	1.90
APC-75	75.	5.8	20	11 16"	2.10
APC-100	99.	6.8	27	59 64"	2.30
APC-140	139.	8.3	37	1 7/32"	2.70

Plate spacing: .015" nominal.

Voltage breakdown test: 600 V. R.M.S., 60 cycles.

*MMFD. Capacities are specified as min. maximum and max. minimum values.

"HF" MICRO CONDENSERS

Cadmium plated soldered brass plates and Isolantite insulation insure rigidity, stability and lowest losses. Three different mounting methods are provided. Base mounting by means of a bracket. Single hole panel mounting. Panel mounting by means of two insulated spacer bushings. Equipped with special wide front bearing. Noiseless in operation.

Code	MMFD. CAPACITY*		No. Plates	Dimension "A"	List Price
	Max.	Min.			
HF-15	17.5	2.8	5	17 64"	\$1.70
HF-35	36.	3.2	10	25 64"	1.95
HF-50	52.	3.7	14	1 1/2"	2.05
HF-100	102.	5.3	27	59 64"	2.55
HF-140	142.	6.3	37	1 7/32"	2.90
HF-15-X	15.	3.6	10	23 32"	2.05
HF-30-X	30.	5.2	20	1 5/16"	2.30

Plate spacing: .015" nominal for HF.

.045" nominal for HF-X.

Voltage breakdown test: 600 V. R.M.S., 60 cycles for HF.

1400 V. R.M.S., 60 cycles for HF-X.

*MMFD. Capacities are specified as nominal values.

"HFD" SPLIT-STATOR MICRO CONDENSERS

Like the "HF" single micro condensers, these duals also incorporate advanced features providing maximum efficiency at ultra-high frequencies. Soldered brass plates are cadmium plated. Aluminum front and rear end plates are mounted on a heavy Isolantite base. A wide front bearing and a special split rear bearing together with individual silver-plated Beryllium wipers for each section assure long life and noiseless efficient operation.

Code	MMFD. CAP. PER SEC.*		Plates Per Sec.	Dimension "A"	List Price
	Max.	Min.			
HFD-50	52.	3.6	14	2 5/16"	\$1.70
HFD-100	102.	5.0	27	2 5/16"	5.30
HFD-140	142.	6.	37	2 15/16"	6.00
HFD-15-X	16.	3.8	14	2 15/16"	1.60
HFD-30-X	28.5	5.	19	2 15/16"	5.00

Plate spacing: .015" nominal for HFD.

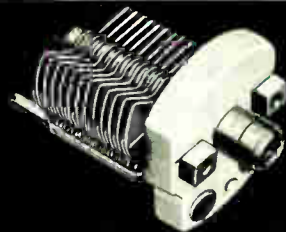
.045" nominal for HF-X.

Voltage breakdown test: 600 V. R.M.S., 60 cycles for HFD.

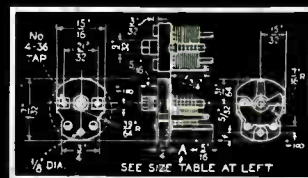
1400 V. R.M.S., 60 cycles for HF-X.

*MMFD. Capacities are specified as nominal values.

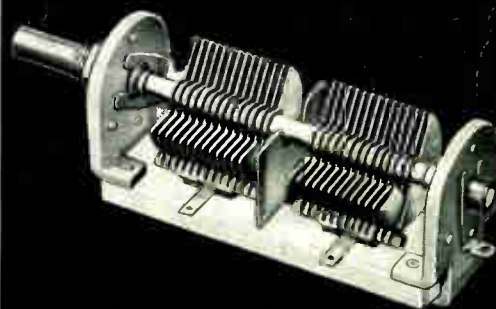
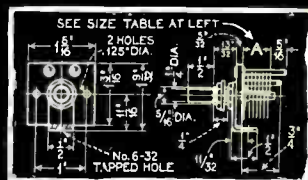
Prices subject to change without notice.



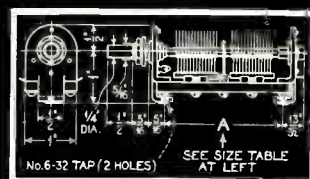
'APC' MICRO CONDENSER



'HF' MICRO CONDENSER



'HFD' SPLIT-STATOR MICRO CONDENSER





HAMMARLUND PRODUCTS

PRECISION STANDARD, MIDGET AND MICRO VARIABLE CONDENSERS; TRIMMING AND PADDING CONDENSERS; PLUG-IN COILS; COIL FORMS; SOCKETS; I. F. TRANSFORMERS; R. F. CHOKES; COUPLINGS; SHIELDS; PROFESSIONAL RECEIVERS AND SPECIAL LABORATORY EQUIPMENT FOR ULTRA-HIGH FREQUENCY, HIGH FREQUENCY AND BROADCAST RECEIVING AND TRANSMITTING.

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