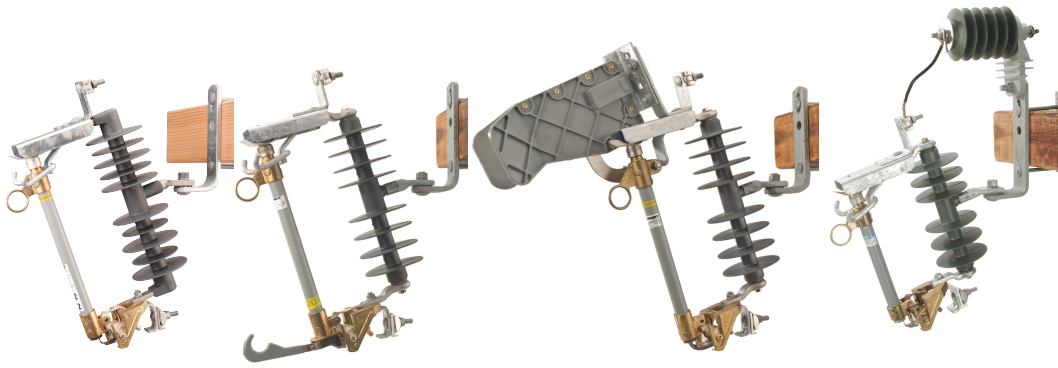
10AA



Type C-POLYMER Cutouts (Standard, Linkbreak, Loadbreak) and Cutout-Arrester Combinations

Catalog 10AA May 2022

HUBBELL®

HUBBELL Type C-Polymer Cutouts

Application

The primary purpose of any cutout is to provide protection to the lines of your system and the various apparatus on those lines such as transformers and capacitor banks. Hubbell Type C-Polymer cutouts provide reliable protection from low-level overloads that just melt the fuse link, intermediate faults, and very high faults, through maximum interrupt rating.

In addition, Type C-Polymer cutouts can also be used as a sectionalizing device. With the use of a portable loadbreak tool, Type C-Polymer cutouts can function much like an overhead disconnect switch. A 300 amp disconnect blade is also available for this purpose.

Quality Construction

Efficient Current Transfer

The Type C-Polymer cutout has an all copper current path. All contacts are silver-plated. Terminals are tin-plated bronze for use with copper or aluminum conductors.

Loadbreak Hooks

Galvanized steel hooks are standard on all Type C cutouts, except the arc chute version, for use with a portable loadbreak tool. These sturdy hooks are mounted on the top support and serve to guide the fuseholder into the latch socket.

Top Contact

The top contact is attached to the galvanized-steel hood by a stainless rivet to provide a smooth self-aligning action during closing even in severely corrosive environments. The top contact provides a socket-type cavity for latching the fuseholder and prevents any possible "over-travel" of the fuseholder. The top contact is made of a highly conductive copper strip with silver-plated embossments for efficient current transfer. The contacts are held under constant pressure designed to maintain firm contact with the fuseholder contact surface until fault interruption is accomplished.

Polymer Insulators

Type C Polymer Cutout Insulators are manufactured with Enhanced Silicone Polymer (ESP), the same material used in Ohio Brass PDV arresters and Hi*Lite Insulators. ESP is a polymer compound made by combining Silicone and EPDM Rubber. This special formulation offers the desirable toughness and resistance to tracking of our original EPR with the hydrophobic characteristics derived from low molecular weight silicone oils.

Hubbell Power Systems uses several tests to evaluate materials. Tracking, QUV, corona cutting, salt fog, oxidative stability and variations of differential thermal analysis tests confirm the quality of the material. For further information on our polymers, ask your Hubbell Power Systems representative for the publication "Polymer Materials for Insulator Weathersheds" EU1264-H.

Upgrades to Cutout Performance

The increased metal-to-metal leakage distance of Type C-Polymer Cutouts compares to their porcelain counterparts at 12.6" (319mm) vs. 8.7" (220mm) for 15kV, 17.1" (420mm) vs. 12.6" (320mm) for 27kV 125kV BIL, 23.6" (600mm) vs. 17.3" (440mm) for 27kV – 150kV BIL and 33.2" (845mm) vs. 26" (660mm) or 28.4" (720mm) for 36kV – 170kV BIL.

Significantly lighter, Type C-Polymer Cutouts typically weigh only approximately half their porcelain counterparts. This ergonomic advantage makes them simple to install and, of course, far less fragile than porcelain. That means reduced or eliminated losses from routine shipping, storage and handling.

Hinge

The hinge on the Type C-Polymer cutout employs large pivot areas for the fuseholder's trunnion and is cast of a copper alloy chosen for its strength and corrosion resistance. The hinge contacts are highly conductive copper alloy stampings and are plated to assure low resistance current transfer from the trunnion casting. The parallel current paths are backed up by high strength cantilever springs and are riveted to the hinge castings. Fuseholder can be dropped into place and easily lifted up and out. No tricky maneuvering is required.

Fuseholders

The solid cap on the single vent fuseholder is silver-plated copper alloy, to provide efficient current transfer. An integral ring is provided in the top tube casting for opening and closing the fuseholder with an appropriate disconnect tool from the ground, from a bucket truck or from the pole.

The **toggle type trunnion** is a selective ***silver-plated bronze casting*** for efficient current transfer to the lower hinge contacts. A cam shaped projection on each side of the trunnion casting provides high pressure parallel current paths to the lower contacts. These projections, or pivot pins, are cast full round for smooth rotational operation in the hinge. The link ejector assists in arc interruption during low fault current or excessive overload conditions. A groove in the center of the link ejector allows the fuse link's pigtail to go directly from the fuse tube to the attachment nut. A curved ejector minimizes bending stresses in the pigtail to prevent broken strands. A stainless steel torsion spring on the link ejector helps to rapidly eject the link from the bore of the fuseholder during interruption. The 200 amp link ejector has a wider groove area and increased spring force to accommodate the larger links.

The **link ejector** is pinned to the trunnion casting with a stainless steel pin to provide resistance to corrosive elements and provide smooth pivotal action. An interlocking feature between the link ejector and tube casting prevents excessive tension on the fuse link during closure, thereby preventing link breakage.

The **link ejector** employs a hammer effect to enhance toggle action of the trunnion during low fault and overload interruptions, hence dropout action is enhanced. The link ejector provides sufficient surface area to facilitate re-fusing by linemen wearing gloves.

Ratings/Specifications

STANDARD Type C-Polymer cutouts are maximum design voltage rated to eliminate application and selection confusion. There are **no restrictions** on application to grounded wye, ungrounded wye, or delta systems having maximum operating voltages (line-to-line) equal to or less than the cutout maximum design voltage rating. (See the LINKBREAK and LOADBREAK cutouts for their specifications.) Interruption tests have been performed at full system line-to-line voltage. 100-amp and 200-amp fuse tubes and 300-amp disconnect blades are available for each voltage class. They all fit into a common mounting assembly rated at 300 amps continuous.

HUBBELL Type C-Polymer Cutouts

Compare Hubbell quality and technical expertise

All Type C Cutouts meet or exceed ANSI/NEMA specifications.

27kV-125kV BIL, 27kV – 150kV BIL, and 36kV – 170kV BIL vary slightly in appearance.

COPPER ARC-SHORTENING ROD (ON SOME RATINGS)

TIN-PLATED BRONZE TERMINALS FOR USE WITH COPPER OR ALUMINUM CONDUCTOR

COPPER CURRENT PATH

GALVANIZED-STEEL ONE PIECE HOOD

POLYMER INSULATOR

STAINLESS STEEL BACKUP SPRING TO MAINTAIN CONTACT PRESSURE

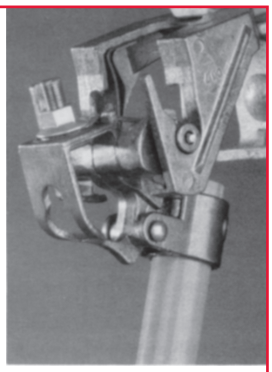
SILVER-TO-SILVER CONTACTS

GALVANIZED STEEL HOOKS FOR LOADBREAK TOOL

CAST BRONZE TOP TUBE CASTING AND PULL RING

SYNTHETIC FUSE TUBE LINER

HIGH-STRENGTH FIBERGLASS FUSETUBE COATED WITH ULTRA-VIOLET INHIBITOR



LARGE NUT OR SS NUT WITH CLAMP TO FASTEN FUSELINK WITHOUT BREAKING STRANDS.

COPPER CURRENT PATH

CAST BRONZE LOWER TUBE CASTING

STAINLESS-STEEL SPRING PROVIDES PROPER TOGGLE ACTION OF FUSELINK EJECTOR

CAST BRONZE HINGE FOR CORROSION RESISTANCE

FUSEHOLDER TOGGLE LATCH LIMITS TENSION OF FUSELINK

MECHANICAL ASSIST:

FUSEHOLDER IS AVAILABLE WITH A TORSIONAL SPRING ON TRUNNION TO AID DROP OUT OPERATION IN CORROSIVE ENVIRONMENTS.

Type C-Polymer STANDARD Cutout

Interchangeability

Chance was the first to design a cutout that could interchange fuseholders and mounting assemblies with those of another manufacture. Standard Type C fuseholders and mounting assemblies are mutually interchangeable with S&C Type XS and ABB Type ICX cutouts. (within the same voltage class).

The Type C-Polymer Standard cutout is mutually interchangeable with Chance Type C Porcelain Standard cutout.

Synthetic Arc-Quenching Fusetube

The 1/2-inch inside diameter of the Type C-Polymer cutout's 100 ampere fusetube increases internal pressure giving superior and reliable expulsion action. During frequently encountered intermediate fault ranges this diameter also permits higher TRV (transient recovery voltage) values to be tolerated. This small bore design eliminates any concern related to high impedance phase-to-phase faults on ungrounded wye and delta systems.

The inside liner is a synthetic arc-quenching formulation in part consisting of polyester fiber, epoxy and Aluminum Tri Hydrate. The liner is chemically bonded to the tube's glass-reinforced shell. This combination provides a moisture source to extinquish the arc during interrupt operations without absorption of atmospheric moisture leading to potential swelling and delamination, and provides a high bursting strength. It is protected from the weather and environment by a special ultra-violet resistant coating. For more information on the synthetic arc-quenching material, refer to Bulletin 10-0201.

The Hubbell fuse tube operates with fuselinks from all major suppliers.

100 amp or smaller fuselinks shall not be used in 200-amp fuseholders.

Brackets

Type C-Polymer cutouts come packed one per carton including a NEMA Heavy Duty "B" bracket with captive 1 1/2" bolt for crossarm mounting.

Type X brackets, also for crossarm mounting, provides 2 5/8" additional clearance between the crossarm and the cutout.

"D" brackets are used to mount cutouts and/or arresters directly to the pole. Three brackets may be used for three-phase application. Type D brackets provide a clean, quick mounting without crossarm or special pole bands.

All the above brackets are galvanized steel for long lasting service. Cutouts can be ordered without any brackets.

Higher Interrupt Capacities

By using a copper arc shortening rod inside the top of the fusetube, higher interrupt ratings are obtainable. An arc shortening rod is attached to the cap of some fusetubes and lowers the fuse link within the fusetube. This permits a much shorter arc, resulting in less arc energy, and higher interrupting capacities. For 200 A tubes, it allows for full voltage ratings.

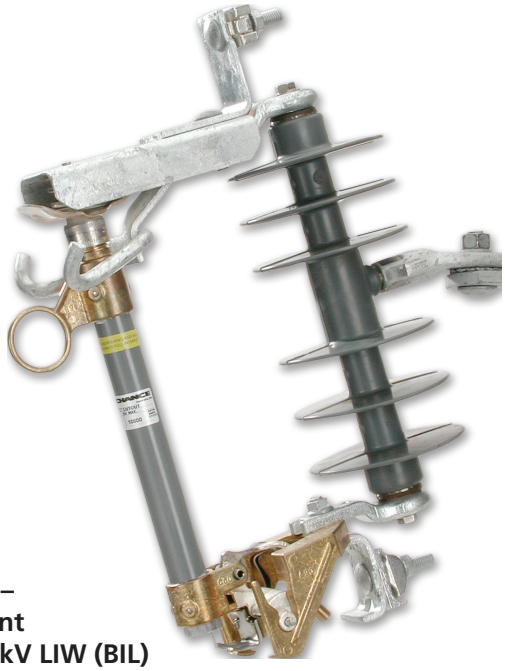
It is necessary to use fuse links with removable buttonheads when arc shortening rods are employed.

Terminals

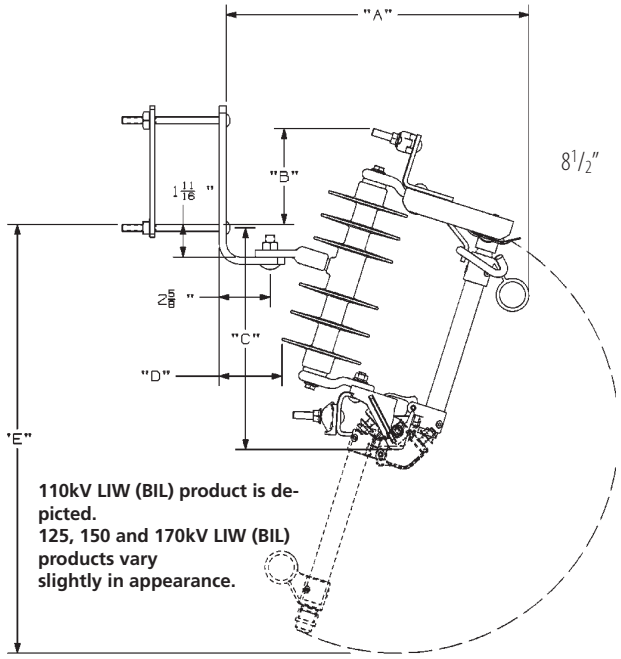
Tin-plated bronze parallel groove type terminals are standard on Type C cutouts. They can accommodate aluminum or copper conductor sizes ranging from No. 6 (13.3 mm^2) solid copper through 4/0 (160.6 mm^2) ACSR or 250 (167.5 mm^2) kcmil stranded copper. The parallel groove design is perfect for handling two different sizes of conductor as is the case when arresters are being used. Eyebolts are also available. See ordering data, page 10AA-11.

Extra Corrosion Protection

Type C cutouts are available with components of stainless steel brackets, hood and hardware, and copper alloy loadbreak hooks to offer greater corrosion resistance for environmental areas where corrosion can become a major factor. To order a stainless steel/copper alloy cutout add the suffix "S" to the end of the catalog number with the rating specifications desired. In additon, an optional spring assist may be provided to further enhance the toggle and drop out action in highly corrosive applications.



**100 Amp –
Single Vent
15kV/110kV LIW (BIL)**



**110kV LIW (BIL) product is depicted.
125, 150 and 170kV LIW (BIL) products vary slightly in appearance.**

STANDARD Type C-Polymer Cutout with NEMA Type B Bracket

kV LIW (BIL)	A	B	C	D	E
110	15 5/8"	4 7/8"	11 5/8"	3 1/4"	22 1/16"
	395 mm	125 mm	295 mm	82 mm	561 mm
125	16 1/16"	6 5/8"	13 1/16"	2 7/8"	27"
	408 mm	167 mm	332 mm	72 mm	686 mm
150	16 1/16"	6 5/8"	13 1/16"	2 7/8"	27"
	408 mm	167 mm	332 mm	72 mm	686 mm
170	17 1/4"	8 1/2"	15"	1 3/4"	32 1/2"
	438 mm	216 mm	381 mm	416 mm	826 mm

Type C-Polymer STANDARD Cutouts

Specifications and Ordering Information

All Type C Cutouts meet or exceed ANSI/NEMA specifications.

See page 10AA-14 for Arrester Cutout Combinations
See page 10AA-15 for Accessories.
See page 10AA-16 for Complete Catalog Numbering

15kV - 110kV LIW (BIL) RUS LISTED

*Base Catalog No.	*Option suffixes below	Maximum Design Voltage	Nominal System Voltage	Continuous Curent (Amps)	Interrupt Capacity (Asym Amps)	Leakage to Ground Metal to Metal (minimum)		*Weight (lb./kg.)	Replacement Fusetube Cap/ Cap Assembly	Arc Shortening Rod
CP710112	1 2 3	15kV	Thru 14.4kV	100	10,000	12.6″	319 mm	9.6/4.4	P7001535P	No
CP710114	1 2 3	15kV	Thru 14.4kV	100	16,000	12.6″	319 mm	9.8/4.5	E7001767P	Yes‡
CP710143	1 2 3	15kV	Thru 14.4kV	200	12,000	12.6″	319 mm	10.4/4.7	E7002146P	Yes‡
CP710133	1 2 3	15kV	Thru 14.4kV	300	12,000**	12.6″	319 mm	9.9/4.5	P7001535P	N/A

27kV - 125kV LIW (BIL)

CP710211	1 2 3	27kV	Thru 24.9kV	100	8,000	17.1″	420 mm	11.0/5.0	P7001535P	No
CP710213	1 2 3	27kV	Thru 24.9kV	100	12,000	17.1″	420 mm	11.0/5.0	E7001768P	Yes‡
CP710242	1 2 3	27kV	Thru 24.9kV	200	10,000	17.1″	420 mm	11.6/5.3	E7002479P	Yes‡
CP710243	1 2 3	27kV	Thru 24.9kV	200	12,000	17.1″	420 mm	11.6/5.3	PSE7002706P	Yes‡
CP710233	1 2 3	27kV	Thru 24.9kV	300	12,000**	17.1″	420 mm	11.2/5.1	P7001535P	N/A

27kV - 150kV LIW (BIL)

CP710311	1 2 3	27kV	No Restrictions thru 24.9kV; †26.4 thru 34.5kV	100	8,000	23.6″	600 mm	10.7/4.8	P7001535P	No
CP710313	1 2 3	27kV		100	12,000	23.6″	600 mm	10.7/4.8	E7001768P	Yes‡
CP710342	1 2 3	27kV		200	10,000	23.6″	600 mm	11.3/5.1	E7002479P	Yes‡
CP710343	1 2 3	27kV		200	12,000	23.6″	600 mm	11.3/5.1	PSE7002706P	Yes‡
CP710333	1 2 3	27kV		300	12,000**	23.6″	600 mm	10.9/4.9	P7001535P	N/A

*Adjust total weight when selecting Options **Momentary rating - Solid blade. ‡Must use removable buttonhead fuse links.

†For application on single-phase to neutral or three-phase solidly grounded wye-connected circuits where recovery voltage does not exceed the maximum design voltage of the device.

36kV - 170kV LIW (BIL) Standard PCO

Base Catalog Number	Maximum Design Voltage	LIW (BIL)	Nominal System Voltage	Continuous Current (Amps)	Interrupt Capacity (Asym Amps)	Leakage to Ground Metal to Metal		Weight (lb/ kg)	Replacement Fusetube Cap	Arc Shortening Rod
CP710613	36kV	170	Thru 34.5kV	100	12,000	33.2″	845 mm	12.5/5.7	E7001743P	Yes‡
CP710643	36kV	170	No Restrictions thru 24.9kV; †26.4 thru 34.5kV	200	12,000	33.2″	845 mm	12.9/5.9	E7002117P	Yes‡
CP710633	36kV	150	Thru 34.5kV**	300	12,000**	33.2″	845 mm	12.5/5.7	P7001535P	N/A

*Adjust total weight when selecting Options **Momentary rating - Solid blade. ‡Must use removable buttonhead fuse links.

†For application on single-phase to neutral or three-phase solidly grounded wye-connected circuits where recovery voltage does not exceed the maximum design voltage of the device.

*Option Suffix 1
Terminal Variations

Suffix 1	Description	*Weight (lb./kg.)
P	Parallel-groove clamps	0.33/0.15
E	Small eyebolts	0.16/0.07
L	Large eyebolts	0.31/0.14
R	Lower PG Clamp Rotated 90°	0.33/.015

Must specify one selection for Option 1.

*Option Suffix 2
Bracket Variations

Suffix 2	Description	*Weight (lb./kg.)
B	NEMA Heavy Duty "B" bracket for crossarm ($1^{1}/_{2}$" bolt)	2.84/1.29
X	Extended type bracket for crossarm (Horizontal section is $2^{5}/_{8}$" longer than Type B bracket)	3.75/1.70
D	D-shape bracket (pole)	7.67/3.48
Z	No bracket (must be used with M in Option 3)	—
Blank	No bracket (cannot use with M in Option 3)	—
V	Easy-On Bracket for crossarm (Height: $4^{1}/_{8}$" to $5^{5}/_{32}$" Width: $2^{3}/_{4}$" to 4")	2.9/1.32

*Option Suffix 3
Mechanical Assist Fuseholder

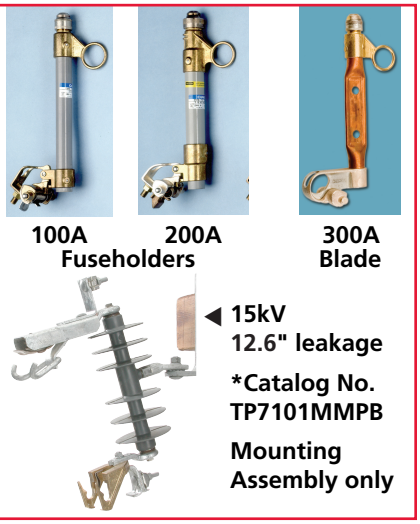
Suffix 3	Description
Blank	No option (may not be used with Z in Option 2)
M	Mechanical Assist Fuseholder (may not be used with Blank in Option 2)
F	Fargo cutout cover (may not be used with Blank in Option 2)
S	Anti-corrosion stainless steel/copper alloy cutout

STANDARD Fuseholders and Mounting Assemblies

15kV - 110kV LIW (BIL)

Cutout Base Catalog #	Fuseholder/ Blade Catalog Number	Fuseholder/ Blade Weight	Mounting Assembly *Base Catalog Number	*Mounting Assembly Weight
CP710112	T710112T	1.8 lb./0.76 kg.	TP7101MM	8.0 lb./3.6 kg.
CP710114	T710114T	2.0 lb./0.79 kg.		
CP710143	T710143T	2.6 lb./1.18 kg.		
CP710133	T710133T	2.1 lb./0.95 kg.		

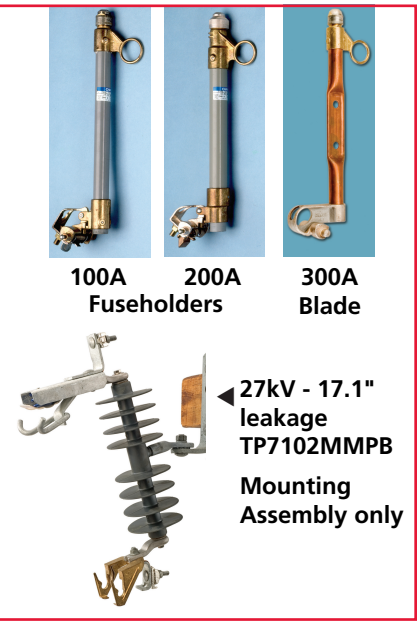
*Mounting assembly Catalog Number must include suffix for terminal variation. Adjust total weight when selecting Option suffixes above.



27kV - 125kV LIW (BIL)

CP710211	T710211T	1.9 lb./0.86 kg.	TP7102MM	9.16 lb./4.1 kg.
CP710213	T710213T	2.0 lb./0.91 kg.		
CP710242	T71024T	2.5 lb./1.13 kg.		
CP710243	T710243T	2.5 lb./1.13 kg.		
CP710233	T710233T	2.1 lb./0.97 kg.		

*Mounting assembly Catalog Number must include suffix for terminal variation. Adjust total weight when selecting Option suffixes above.



27kV - 150kV LIW (BIL)

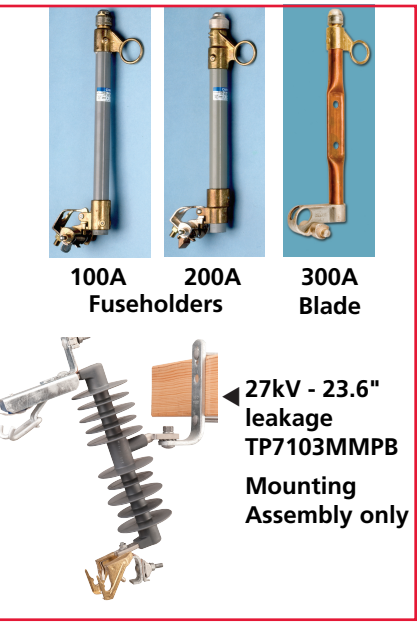
CP710311	T710311T	1.9 lb./0.86 kg.	TP7103MM	9.51 lb./4.31 kg.
CP710313	T710313T	2.0 lb./0.91 kg.		
CP710242	T710242T	2.5 lb/1.13 kg.		
CP710343	T710343T	2.5 lb./1.13 kg.		
CP710333	T710333T	2.1 lb./0.97 kg.		

*Mounting assembly Catalog Number must include suffix for terminal variation. Adjust total weight when selecting Option suffixes above.

36kV - 170kV LIW (BIL)

CP710613	T710613T	2.8lb./1.27kg.	TP7106MM	9.7lb/4.4kg.
CP710643	T710643T	3.2lb./1.45kg.		
CP710633	T710633T	2.8lb./1.27kg.		

*Mounting assembly Catalog Number must include suffix for terminal variation. Adjust total weight when selecting Option suffixes above.



Universal Cutout Tool

Ideal for Standard and Linkbreak 100 amp fuse holders (ABB, Chance S&C) to easily lift out, place, *open and close. Inverted, secure method also fits Chance Electronic Sectionalizers.

Cat. No. **PSC4033484 (Wt. 4 oz.)** See Tools Catalog Section 2100.

When opening a cutout, follow all work rules and OSHA regulations.* ***Not for use with Loadbreak cutouts.*

Type C-Polymer LINKBREAK Cutouts

15kV - 110kV LIW (BIL)
15/27kV - 125kV LIW (BIL)
22/36.4kV - 150kV LIW (BIL)
22/36.4kV - 170kV LIW (BIL)

Application

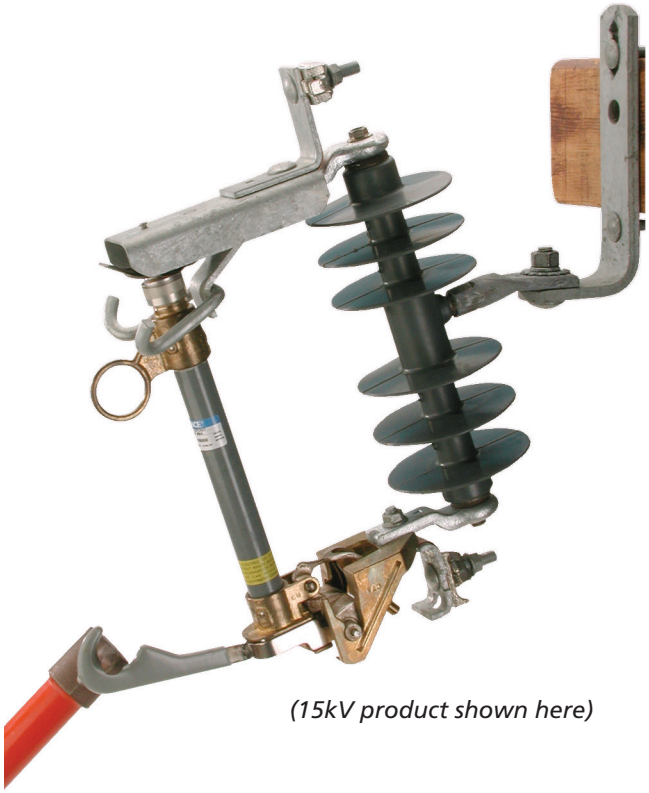
The Type C-Polymer 100 amp Linkbreak cutout provides short circuit protection to utility lines with the added feature of mechanical linkbreak capability in a loadbreaking function. Linkbreak cutouts provide reliable protection from overloads that just melt the fuselink through the maximum interrupt capacity of the fuseholder and also provide inductive and capacitive loadbreak capability. For loadbreak ratings see chart, next page.

The unit will also accept the Type C-Polymer 200 amp non-loadbreak fuseholder or a 300 amp disconnect blade. Each Linkbreak cutout includes standard loadbreak hooks to use with portable loadbreak tools. This method is particularly useful for switching of the 200 amp fuseholder and 300 amp disconnect blade.

Design / Product Features

Construction and product details shown on page 10AA-3 apply to the Linkbreak cutout except that the link-ejector on the linkbreak fuseholder is a copper-alloy casting instead of a stainless-steel stamping.

The unit utilizes a stainless-steel linkbreak lever to mechanically break fuselink elements thereby obtaining load interruption within the fuseholder.



(15kV product shown here)

A sharp downward pull on the lever with a hookstick breaks the fuselink. (15/27kV product shown here)

All standard non-loadbreak fuseholders and the linkbreak fuseholders are interchangeable and fit into both the non-loadbreak and Type C-Polymer or Porcelain Linkbreak cutout mounting assemblies. Mounting assemblies are the same as those for Type C-Polymer or Porcelain STANDARD cutouts, shown on page 10AA-5.

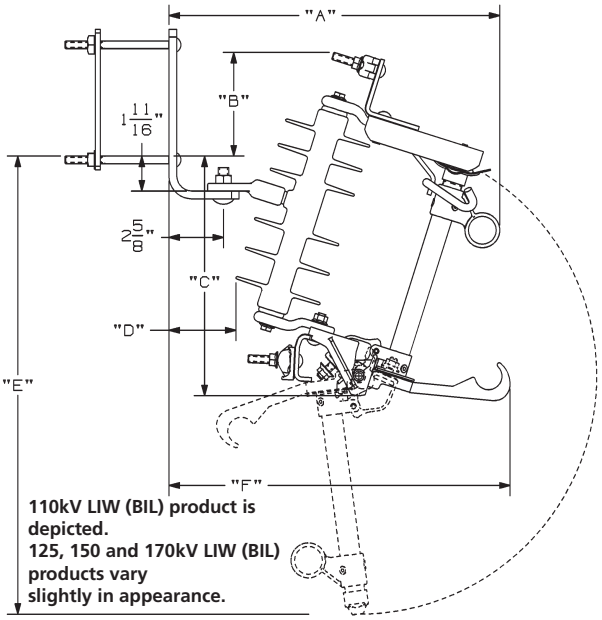
Ratings / Specifications

The 15kV Type C-Polymer Linkbreak cutout has a maximum design voltage rating of 15kV. There are no voltage restrictions on application to grounded wye, ungrounded wye, or delta systems having maximum operating voltages (line to line) equal to or less than the cutout maximum design voltage rating.

15/27kV and 22/36.4kV Type C-Polymer Linkbreak cutouts have maximum design slant voltage ratings. These cutouts are to be used on systems which have phase-to-ground voltages no greater than the value listed to the left of the slant (/) and which have phase-to-phase voltages no greater than the value listed to the right of the slant.

The Type C-Polymer Linkbreak cutout is to be used with fuselinks requiring 1 inch or less elongation before breaking. Fuselinks requiring more than 1 inch elongation before breaking must not be used with the Type C-Polymer Linkbreak cutout.

Type C-Polymer 100-Amp LINKBREAK Cutout



110kV LIW (BIL) product is depicted.
125, 150 and 170kV LIW (BIL) products vary slightly in appearance.

LINKBREAK Cutout with NEMA Type B Bracket Dimensions

kV LIW (BIL	A	B	C	D	E	F
110	15 15/16"	4 15/16"	11 5/8"	3 1/4"	22 1/8"	16 7/16"
	405 mm	125 mm	295 mm	82 mm	561 mm	417 mm
125	16 7/8"	6 9/16"	13 1/4"	2 7/8"	27 1/4"	15 7/8"
	418 mm	167 mm	337 mm	72 mm	692 mm	403 mm
150	16 7/8"	6 9/16"	13 1/4"	2 7/8"	27 1/4"	15 7/8"
	418 mm	167 mm	337 mm	72 mm	692 mm	403 mm
170	17-1/4"	8-1/2"	15"	1-3/4"	32-1/2"	14-1/2"
	438mm	216mm	381mm	416mm	826mm	368mm

Loadbreak Ratings

*Base Cutout Catalog Number	kV, Nominal System Voltage	Inductive Amperes	Capacitive Amperes
CP720112	14.4	100	100
CP720114	14.4	100	100
CP720211†	24.9	100	100
CP720213†	24.9	100	100
CP720311†	34.5	100	50
CP720313†	34.5	100	50
CP720613	34.5	100	50

*See specifications and ordering information below.
†Limited to grounded-wye systems with grounded-wye loads.

See page 10AA-14 for Arrester Cutout Combinations
See page 10AA-16 for Accessories.
See page 10AA-15 for Complete Catalog Numbering

Specifications and Ordering Information

All Type C Cutouts meet or exceed ANSI/NEMA specifications.

15kV - 110kV LIW (BIL) RUS LISTED

*Base Catalog No.	*Option suffixes below	Maximum Design Voltage	Nominal System Voltage	Continuous Curent (Amps)	Interrupt Capacity (Asym Amps)	Leakage to Ground Metal to Metal (minimum)		*Weight (lb./kg.)	Replacement Fusetube Cap/ Cap Assembly	Arc Shortening Rod
CP720112	1 2 3	15kV	Thru 14.4kV	100	10,000	12.6"	319 mm	10.2/4.6	P7001469P	No
CP720114	1 2 3	15kV	Thru 14.4kV	100	16,000	12.6"	319 mm	10.3/4.7	E7001784P	Yes‡

15/27kV - 125kV LIW (BIL) RUS LISTED

CP720211	1 2 3	15/27kV	No Restrictions thru 14.9kV; †20.8 thru 24.9kV	100	8,000	17.1"	420 mm	11.4/5.2	P7001469P	No
CP720213	1 2 3	15/27kV		100	12,000	17.1"	420 mm	11.4/5.2	E7001785P	Yes‡

22/36.4kV - 150kV LIW (BIL)

CP720311	1 2 3	22/36.4kV	No Restrictions thru 14.9kV; †22.8 thru 34.5kV	100	8,000	23.6"	600 mm	11.2/5.1	P7001469P	No
CP720313	1 2 3	22/36.4kV		100	12,000	23.6"	600 mm	11.2/5.1	E7001785P	Yes

22/36.4kV - 170kV LIW (BIL)

CP720613	1 2 3	22/36.4kV	No Restrictions thru 14.9kV; †22.8 thru 34.5kV	100	12,000	33.2"	845 mm	13.2/6.0	PE7001787P	Yes‡

*Adjust total weight when selecting Options ‡Must use removable buttonhead fuse links.

†For application on single-phase to neutral circuits with phase-to-ground voltages not exceeding the value to the left of the slant; and for application on three-phase solidly-grounded-wye systems with solidly-grounded loads with line-to-line voltages not exceeding the value to the right of the slant.

Type C-Polymer 100-Amp LINKBREAK Cutout

*Option Suffix 1
Terminal Variations

Suffix 1	Description	*Weight (lb./kg.)
P	Parallel-groove clamps	0.33/0.15
E	Small eyebolts	0.16/0.07
L	Large eyebolts	0.31/0.14
R	Lower PG Clamp Rotated 90°	0.33/.015

Must specify one selection for Option 1.

*Option Suffix 2
Bracket Variations

Suffix 2	Description	*Weight (lb./kg.)
B	NEMA Heavy Duty "B" bracket for crossarm ($1^1/_2$" bolt)	2.84/1.29
X	Extended type bracket for crossarm (Horizontal section is $2^5/_8$" longer than Type B bracket)	3.75/1.70
D	D-shape bracket (pole)	7.67/3.48
Z	No bracket (must be used with M in Option 3)	—
Blank	No bracket (cannot use with M in Option 3)	—
V	Easy-On Bracket for crossarm (Height: $4^1/_8$" to $5^5/_{32}$" Width: $2^3/_4$" to 4")	2.9/1.32

*Option Suffix 3
Mechanical Assist Fuseholder

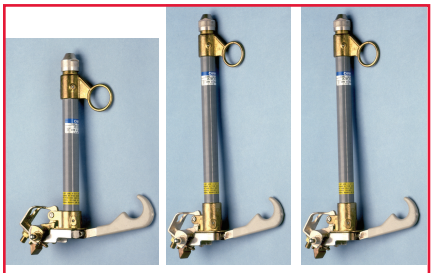
Suffix 3	Description
Blank	No option (may not be used with Z in Option 2)
M	Mechanical Assist Fuseholder (may not be used with Blank in Option 2)
F	Fargo cutout cover (available for 15kV only) (may not be used with Blank in Option 2)
S	Anti-corrosion stainless steel/copper alloy cutout

Fuseholders

*Fuseholders (100 Amp only)

kV & LIW (BIL)	Cutout Base Catalog Number	Fuseholder Catalog No.	Weight lb.	Weight kg.
15kV 110kV BIL	CP720112	T720112T	2.5	1.13
	CP720114	T720114T	2.7	1.22
15/27kV 125kV BIL	CP720211	T720211T	2.7	1.22
	CP720213	T720213T	2.9	1.32
22/36.4kV 150kV BIL	CP720311	T720311T	2.7	1.22
	CP720313	T720313T	2.9	1.32
22/36.4kV 170kV BIL	CP720613	T720613T	3.5	1.59

*Mounting assemblies are same as STANDARD cutouts, on 10AA-5.

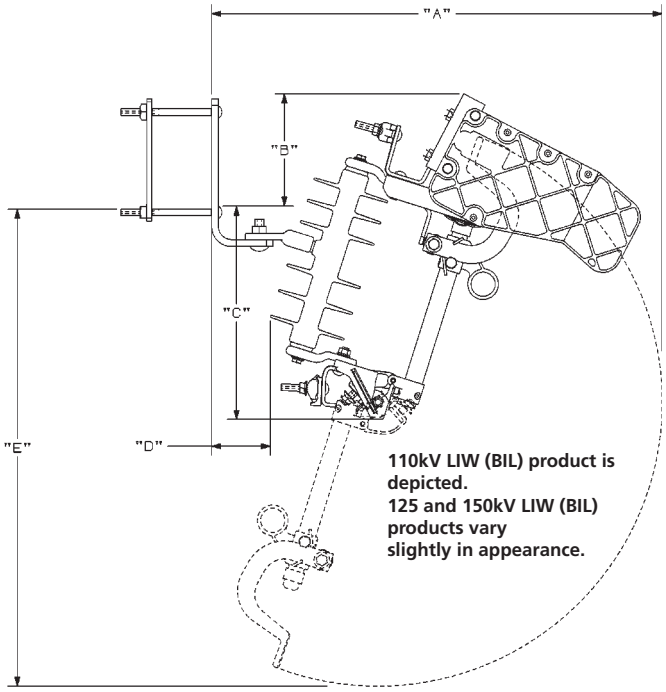


110kV LIW (BIL) **125kV LIW (BIL)** **150kV LIW (BIL)**

Fuseholders

Type C-Polymer LOADBREAK Cutouts with Arc Chute Interrupter

15kV - 110kV LIW (BIL)
15/27kV - 125/150kV LIW (BIL)
20/34.5kV - 150kV LIW (BIL)



Application

The Type C-Polymer Loadbreak Cutout is available for application on 15 and 27kV distribution systems. The addition of the arc chute expands the flexibility of the Chance protective devices family by providing loadbreak capability for cutouts and disconnect solid blade units. The loadbreak cutout provides short circuit protection to utility lines with the added feature of a loadbreaking function.

The loadbreak cutout is applicable for transformer and capacitor bank switching or line sectionalizing. Loadbreak cutouts provide protection from overloads that just melt the fuselink through the maximum interrupt capacity of the fuseholder. They also provide loadbreak capability through 300 amperes.

Design

All design features and most components of the loadbreak unit are identical to those incorporated in the Type C-Polymer standard cutout. The loadbreak portion of the Type C-Polymer Loadbreak cutout is a heavy duty, reliable load interrupter that provides a positive visible loadbreak. A common loadbreak mounting assembly will accept the Chance Type C-Polymer 100 amp and 200 amp loadbreak fuseholders or a 300 amp loadbreak disconnect blade. The Type C-Polymer LOADBREAK fuseholder is not designed to be interchangeable with any other manufacturer's cutout.

Ratings/Specifications

15kV Type C-Polymer loadbreak cutout has a maximum design voltage rating of 15kV. There are no voltage restrictions on applicaton to grounded wye, ungrounded wye, or delta systems having maximum operating voltages (line to line) equal to or less than the cutout maximum design voltage rating.

15/27kV and 20/34.5kV Type C-Polymer loadbreak cutouts have maximum design slant voltage ratings. These cutouts are to be used on systems which have phase-to-ground voltages no greater than the value listed to the left of the slant (/) and which have phase-to-phase voltages no greater than the value listed to the right of the slant.

Fuseholders and mounting assemblies from other manufacturers' loadbreak cutouts are not interchangeable with Chance loadbreak cutouts. Likewise, Chance fuseholders and mountings are not interchangeable with other manufacturers' loadbreak cutouts.

Dimensions

kV LIW (BIL)	A	B	C	D	E
110	24 13/16" 630 mm	6 3/8" 162 mm	11 5/8" 295 mm	3 1/4" 82 mm	26 5/16" 668 mm
125	27 3/4" 704 mm	7 13/16" 199 mm	13 1/4" 337 mm	2 7/8" 72 mm	31 7/16" 798 mm
150	27 3/4" 704 mm	7 13/16" 199 mm	13 1/4" 337 mm	2 7/8" 72 mm	31 7/16" 798 mm

Operation

The self-contained loadbreak device enables the lineman to interrupt load current by means of a simple hookstick operation. To break the current, the lineman inserts a hookstick into the operating ring and rapidly opens the device. Upon opening, a spring-loaded stainless steel blade mechanism snaps out through a gray arc chute and elongates, cools and extinguishes the confined arc. The loadbreaking operation is independent of the operating speed of the lineman. The fuse remains undamaged. No special or portable tools are required to operate the unit. In the open position, the fuseholder or blade hangs in an approximate vertical position for the visible-break.

Type C-Polymer LOADBREAK Cutouts

Specifications and Ordering Information

All Type C Cutouts meet or exceed ANSI/NEMA specifications.

15kV - 110kV LIW (BIL) RUS LISTED

*Base Catalog No.	*Option suffixes below	Maximum Design Voltage	Nominal System Voltage	Continuous Current (Amps)	Number of Operations	Interrupt Capacity (Asym Amps)	Leakage to Ground Metal to Metal (minimum)		*Weight (lb./kg.)	Replacement Fusetube Cap/ Cap Assembly	Arc Shortening Rod
CP730112	1 2 3	15kV	Thru 14.4kV	100	200	10,000	12.6″	319 mm	15.1/6.8	P7001535P	No
CP730114	1 2 3	15kV	Thru 14.4kV	100	200	16,000	12.6″	319 mm	15.2/6.9	E7001767P	Yes‡
CP730143	1 2 3	15kV	Thru 14.4kV	200	200	12,000	12.6″	319 mm	15.8/7.2	E7002146P	Yes‡
CP730133	1 2 3	15kV	Thru 14.4kV	300	50	12,000**	12.6″	319 mm	15.4/7.0	P7001535P	N/A

See page 10AA-14 for Arrester Cutout Combinations
See page 10AA-15 for Accessories.
See page 10AA-16 for Complete Catalog Numbering

15/27kV

			LIW (BIL)								
CP730211	1 2 3	15/27kV	125kV	No Restrictions thru 14.4kV; †20.8 thru 24.9kV	100	200	8,000	17.1″	420 mm	15.5/7.0	P7001535P	No
CP730213	1 2 3	15/27kV	125kV		100	200	12,000	17.1″	420 mm	15.6/7.1	E7001768P	Yes‡
CP730242	1 2 3	15/27kV	125kV		200	200	10,000	17.1″	420 mm	16.2/7.4	E7002479P	Yes‡
CP730243	1 2 3	15/27kV	125kV		200	200	12,000	17.1″	420 mm	16.2/7.4	PSE7002706	Yes‡
CP730342	1 2 3	15/27kV	150kV		200	200	10,000	23.6″	600 mm	15.9/7.2	E7002479P	Yes‡
CP730343	1 2 3	15/27kV	150kV		200	200	12,000	23.6″	600 mm	15.9/7.2	PSE7002706	Yes
CP730233	1 2 3	15/27kV	125kV		300	50	12,000**	17.1″	420 mm	15.8/7.2	P7001535P	N/A
CP730333	1 2 3	15/27kV	150kV.		300	50	12,000**	23.6″	600 mm	15.5/7.0	P7001535P	N/A

20/34.5kV - 150kV LIW (BIL)

CP730311	1 2 3	20/34.5kV	No Restrictions thru 14.4kV; †20.8 thru 34.5kV		100	100	8,000	23.6″	600 mm	15.2/6.9	P7001535P	No
CP730313	1 2 3	20/34.5kV			100	100	12,000	23.6″	600 mm	15.3/6.9	E7001768P	Yes

*Adjust total weight when selecting Options **Momentary rating — Solid blade ‡Must use removable buttonhead fuse links.

†For application on single-phase to neutral circuits with phase-to-ground voltages not exceeding the value to the left of the slant; and for application on three-phase solidly-grounded-wye systems with solidly-grounded loads with line-to-line voltages not exceeding the value to the right of the slant.

*Option Suffix 1
Terminal Variations

Suffix 1	Description	*Weight (lb./kg.)
P	Parallel-groove clamps	0.33/0.15
E	Small eyebolts	0.16/0.07
L	Large eyebolts	0.31/0.14
R	Lower PG Clamp Rotated 90°	0.33/.015

Must specify one selection for Option 1.

*Option Suffix 2
Bracket Variations

Suffix 2	Description	*Weight (lb./kg.)
B	NEMA Heavy Duty "B" bracket for crossarm ($1^1/_2$″ bolt)	2.84/1.29
X	Extended type bracket for crossarm (Horizontal section is $2^5/_8$″ longer than Type B bracket)	3.75/1.70
D	D-shape bracket (pole)	7.67/3.48
Z	No bracket (must be used with M in Option 3)	—
Blank	No bracket (cannot use with M in Option 3)	—
V	Easy-On Bracket for crossarm (Height: $4^1/_8$″ to $5^5/_{32}$″ Width: $2^3/_4$″ to 4″)	2.9/1.32

*Option Suffix 3
Mechanical Assist Fuseholder

Suffix 3	Description
Blank	No option (may not be used with Z in Option 2)
M	Mechanical Assist Fuseholder (may not be used with Blank in Option 2)
F	Fargo cutout cover (may not be used with Blank in Option 2)
S	Anti-corrosion stainless steel/copper alloy cutout

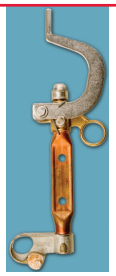
LOADBREAK Fuseholders and Mounting Assemblies

15kV - 110kV LIW (BIL)

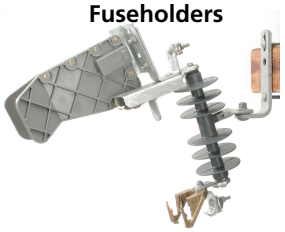
Cutout Base Catalog Number	Fuseholder/ Blade Catalog Number	Fuseholder/ Blade Weight	Mounting Assembly *Base Catalog Number	*Mounting Assembly Weight
CP730112	T730112T	3.3 lb./1.5 kg.	TP7301MM	10.0 lb./4.5 kg.
CP730114	T730114T	3.5 lb./1.6 kg.		
CP730143	T730143T	4.1 lb./1.9 kg.		
CP730133	T730133T	3.6 lb./1.6 kg.		

*Mounting assembly Catalog Number must include suffix for terminal variation. Adjust total weight when selecting Option suffixes above.





100A Fuseholders 200A Fuseholders 300A Blade



◀ 15kV Cat. No. TP7301MMPB Mounting Assembly only

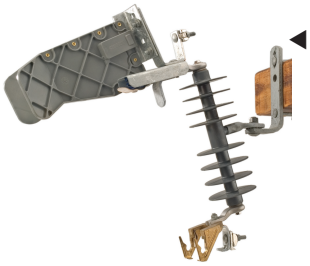
15/27kV

			LIW (BIL)		
CP730211	T730211T	3.6 lb./1.6 kg.	125kV	TP7302MM	11.1 lb./5.0 kg.
CP730213	T730213T	3.8 lb./1.7 kg.	125kV	TP7302MM	11.1 lb./5.0 kg.
CP730242	T730242T	4.4 lb./2.0 kg.	125kV	TP7302MM	11.1 lb./5.0 kg.
CP730243	T730243T	4.4 lb./2.0 kg.	125kV	TP7302MM	11.1 lb./5.0 kg.
CP730342	T730342T	4.4 lb/ 2.0 kg.	150kV	TP7303MM	11.5 lb./5.2 kg.
CP730343	T730343T	4.4 lb./2.0 kg	150kV	TP7303MM	11.5 lb./5.2 kg.
CP730233	T730233T	4.0 lb./1.8 kg.	125kV	TP7302MM	11.1 lb./5.0 kg.
CP730333	T730333T	4.0 lb./1.8 kg.	150kV	TP7303MM	11.5 lb./5.2 kg.

*Mounting assembly Catalog Number must include suffix for terminal variation. Adjust total weight when selecting Option suffixes above.



100A Fuseholders 200A Fuseholders 300A Blade



◀ 15/27kV - 125kV BIL Cat. No. TP7302MMPB Mounting Assembly only

20/34.5kV - 150kV LIW (BIL)

CP730311	T730231T	3.6 lb./1.6 kg.	TP7303MM	11.5 lb./5.2 kg.
CP730313	T730233T	3.8 lb./1.7 kg.		

*Mounting assembly Catalog Number must include suffix for terminal variation. Adjust total weight when selecting Option suffixes above.



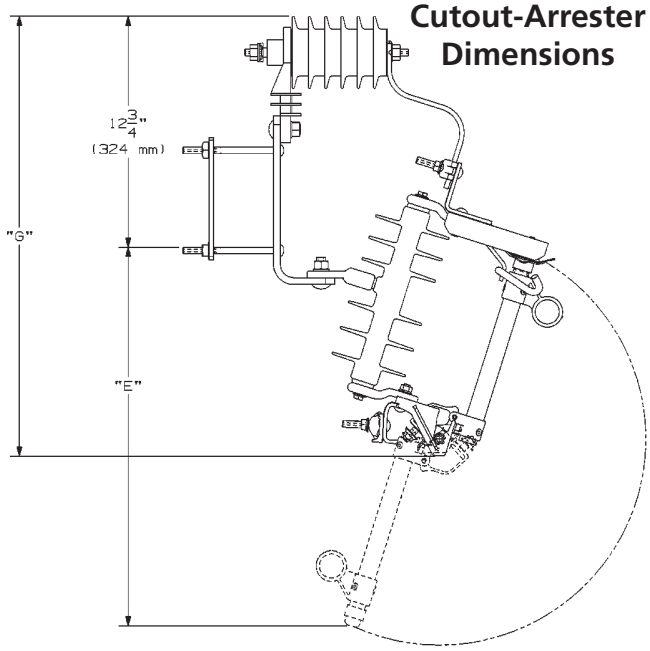
100A Fuseholders 200A Fuseholders 300A Blade

◀ 20/34.5kV-150kV LIW (BIL) Cat. No. TP7303MMPB Mounting Assembly only

Type C-Polymer Cutout-Arrester Combinations
Over-the-Arm Type only

15kV cutout with direct-connected Ohio Brass MOV, polymer 9kV lightning arrester

Cutout-Arrester Dimensions



110kV LIW (BIL) product is depicted.
125, 150 and 170kV LIW (BIL) vary slightly in appearance

Dimensions

kV LIW (BIL)	E	G
110	20 7/8" 531 mm	24 5/16" 617 mm
125	26 1/4" 667 mm	25 7/8" 657 mm
150	26 1/4" 667 mm	25 7/8" 657 mm
170	26-1/4" 667 mm	25-7/8" 657 mm

For other dimensions see STANDARD Cutout, page 4.

Advantages of combination

The total installed cost of a Hubbell cutout-arrester combination is less than the total installed cost of separately purchased components. The combination units install faster, more economically and take up less space in storage, transit and service. Each combined unit takes up a minimum of space on the crossarm and has a favorable weight distribution for minimal off-center loading. The field-proven quality of both cutout and arrester assure consistent high performance for the combinations.

These units include Chance cutouts fitted with only Ohio Brass® MOV arresters, superseding previous silicon-carbide units. For easy conversion to the new arrester designation system, refer to the Cutout Cross-Reference Guide, Bulletin 10-0203.

Ordering Information

To specify a Cutout-Arrester Combination:

1. Select a two-letter designation for the appropriate arrester from the shaded section of the Table at left.

2. Substitute the two letters for the "0" in the Base Catalog No. for the appropriate Cutout listed on page 5, 7 or 9.

Type C-Polymer Cutouts
Catalog Numbering System

Position 6 - Type C Polymer Cutout -kV Rating								
No.	BilkV	Standard			Linkbreak	Loadbreak		
		100A	200A	300A	100A	100A	200A	300A
1	110	15	15	15	15	15	15	15
2	125	27	27	27	15/27	15/27	15/27	15/27
3	150						15/27	15/27
3	150	27	27	27	22/36.4	20/34.5		
6	170	36	36	36	22/36.4			

1 represents 319 mm Creep Insulator Assembly
2 represents 420 mm Creep Insulator Assembly
3 represents 600 mm Creep Insulator Assembly
6 Represents 845 mm Creep Insulator Assembly

Position 11, 12 ,13

Blank = No option (may not be used with Z in position 10)
M = Mechanical Assist Fuseholder (may not be used with Blank in position 10)*
S = Stainless Option*
F = Add Cutout Cover

*We recommend ordering option M and S together

Position 10 - Bracket Variations

B = NEMA Heavy Duty "B" bracket for crossarm (1-1/2" bolt)
X = Extended type bracket for crossarm (Horizontal section is 2-5/8" longer than type B bracket)
D = D-shape bracket (pole)
V = Easy on bracket
Z = No Bracket (must be used with M in position 11)
Blank = No bracket (cannot use with M in position 11)

Position 3 - Kind

1 = Standard
2 = Linkbreak
3 = Loadbreak

CP	7	3	4	5	6	7	8	9	10	11	12	13

Position 4,5

0 **-** No Arrester
For cutout arrester combinations, see below for two letter arrester codes.

Position 7 - Continuous Current

1 = 100 Amps (Accepts 1 - 100 Amp links)
3 = 300 Amps solid blade
4 = 200 Amps (Accepts 140-200 Amp links)
M = Mounting assembly only

Position 8 - Interrupting or Momentary Current (Amps)

1 = 8,000
2 = 10,000
3 = 12,000 (Must use removable buttonhead links)
4 = 16,000 (Must use removable buttonhead links)
M = Mounting assembly only

Position 9 - Terminal Variations (Tin Plated)

P = Parallel-groove clamps
E = Small eyebolts
L = Large eyebolts
R = 90 deg.
T = Fuseholder only (enter T in position 1 and leave blank positions 10 & 11)

Arrester Manufacturer	MCOV Duty Cycle kV Rating	Arrester Connection Method	Metal Oxide Varister (MOV)			
			Polymer			
			110		125 & 150	150
			9	10	18	27
Ohio Brass	Small Block Normal Duty 5 kA	Direct	DL	DM	DN	DP
	Large Block Heavy Duty 10 kA	Direct	EL	EM	EN	EP
	Riser Pole	Direct	FL	FM	FN	FP

Operating Design
Housing
kV LIW (BIL) for Cutout
kV Rating

Type C-Polymer Cutouts
Accessories

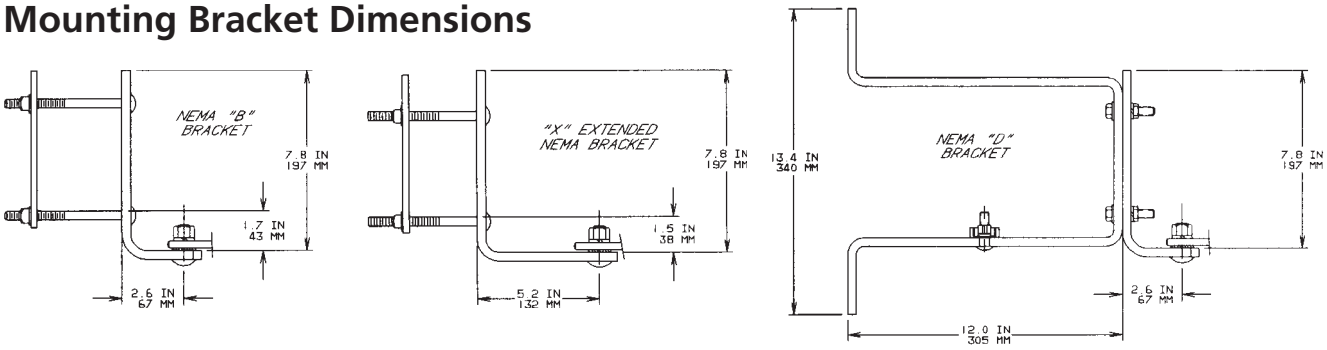
TERMINAL CONNECTORS

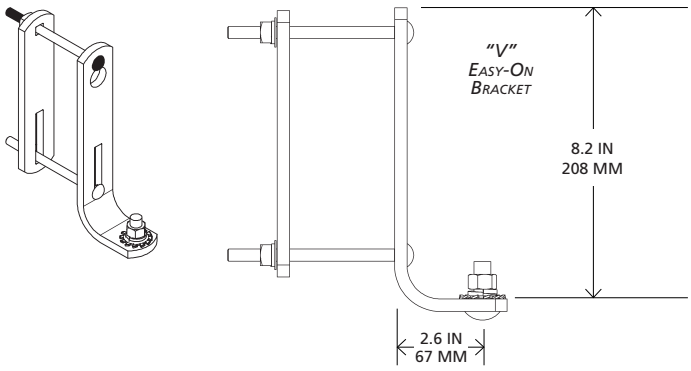
Catalog No.	Description	Weight (lb./kg.)	Minimum Order Quantity
T7001325	Parallel-Groove Clamp, tin-plated bronze for No. 6 solid thru 4/0 ACSR or 250 kcmil stranded	0.33/0.15	10
T7001326	Small Eyebolt for No. 8 solid thru 2/0 stranded	0.16/0.07	10
T7001327	Large Eyebolt for No. 6 solid thru 4/0 ACSR or 250 kcmil stranded	0.40/0.14	10

MOUNTING BRACKETS

C2060283	NEMA Heavy Duty "B" Bracket with $1^{1}/_{2}$" captive bolt for crossarm mounting	2.84/1.29	–
C2060280	Extended Crossarm Bracket (Horizontal section is $2^{5}/_{8}$" longer than NEMA "B" bracket)	3.75/1.70	–
C2060299	"D" Pole Mounting Bracket	7.67/3.48	–
C2060632	Cutout/Arrester Bracket complete with carriage bolts and backstrap	4.00/1.81	–
PSE7002826	"V" Easy-On Bracket for Crossarm Height range: $4^{1}/_{8}$" to $5^{5}/_{32}$", Crossarm Width range: $2^{3}/_{4}$" to 4"	2.9/ 1.32	–

Mounting Bracket Dimensions





Fargo Cutout Cover

ONE PIECE WILDLIFE PROTECTOR

Available as an Option on Standard and Linkbreak Type C-Polymer Cutouts (see pages 10AA-5 and 10AA-7), Cover also may be ordered as a separate line item as Catalog No. CC101. Material: Proprietary low track vinyl that is UV stabilized for long-term performance. Gray color.

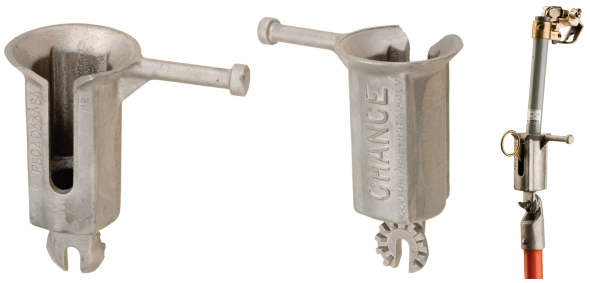
- Designed to provide protection for cutouts from accidental contact by squirrels, birds or other wildlife.
- Universal one-piece design for easy installation or retrofit. Fits Chance 15kV Standard and Linkbreak Cutouts, both Polymer and Porcelain types.

Universal Cutout Tool

Ideal for Standard and Linkbreak 100 amp fuse holders (ABB, Chance S&C) to easily lift out, place, *open and close. Inverted, secure method also fits Chance Electronic Sectionalizers.

Cat. No. **PSC4033484 (Wt. 4 oz.)** See Tools Catalog Section 2100.

When opening a cutout, follow all work rules and OSHA regulations.* ***Not for use with Loadbreak cutouts.*



NOTES

NOTES

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