

Hookstick Operated In-Line Transmission Switch

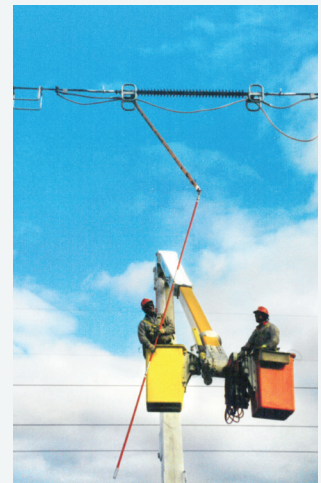
Switch Type ILO-C

69 kV - 230 kV ■ 1200A and 2000A

The Cleaveland/Price Approach

Cleaveland/Price has a very basic approach to design... keep it simple. It is an approach that is employed from material selection to mechanical design.

The Cleaveland/Price ILO-C hookstick operated in-line transmission switch parts are manufactured from high-strength, high-conductivity copper. All switches are of non-cast design for superior dependability of parts. Switch performance is not compromised by flaws that could occur in the casting process.



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Engineered for Simplicity

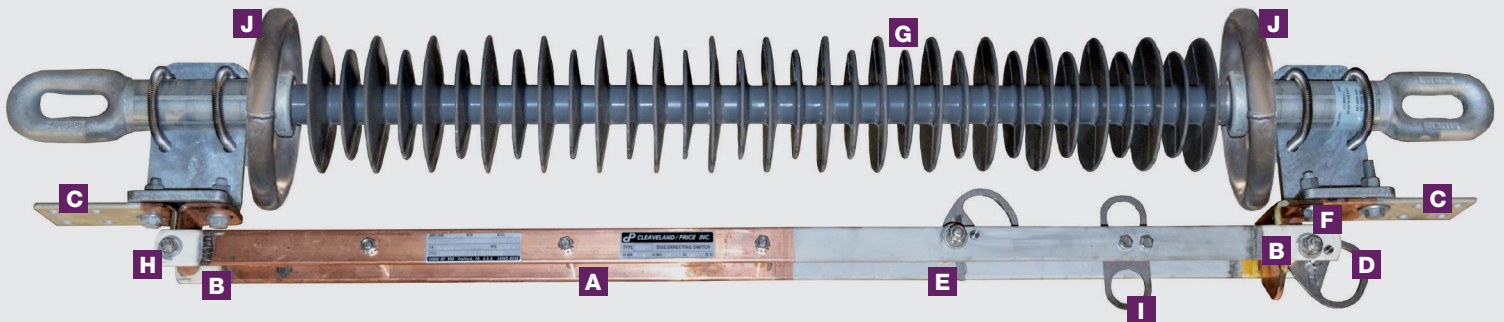
The Cleaveland/Price ILO-C

The ILO-C hookstick operated disconnect switch is a field-proven product; a blend of high technology and simplicity of design. The live parts of the switch are made from hard-drawn, high-conductivity copper, a material selected for maximum strength and minimal switch weight. The switch contacts are high-pressure line type to establish effective current transfer while reducing operating force and extending contact life. Contact surfaces are silver-to-silver. Contact springs are stainless steel and positioned to increase spring force during short circuit. The switch is supplied with a polymer strain insulator having a chain-eye end fitting. The insulator has a high tensile strength rating to perform under ice and wind loads and to assure positive latching of the switch blade in both the open and closed positions. The switch is available with the Cleaveland/Price Superwhip™ to interrupt high levels of line charging current at 115 through 161 kV. The switch is not designed to break load current.



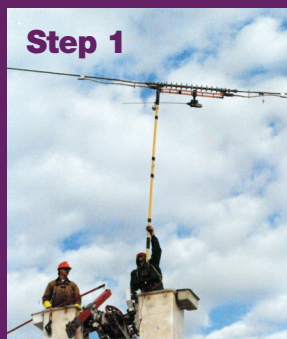
ILO-C Features

- | | |
|--|--|
| A High-conductivity copper live parts | F Closed position latch |
| B Silver-plated contacts | G High-tensile strength insulator |
| C Tin-plated terminal pads | H Stainless steel contact springs |
| D Stainless steel hookeyes | I Latch-check and closing eyes |
| E Open position latch | J Corona rings |

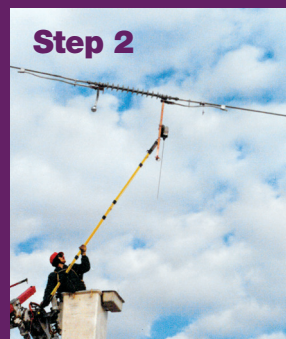


Operation

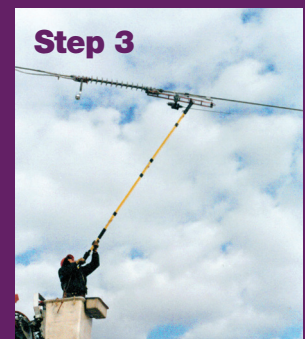
The ILO-C should be operated from an insulated bucket truck with a hotstick. The switch is easy to operate as shown in the photographs to the right. Latching of the switch blade can be verified by using the latch-check eye.



Engage switch hookeye



Open the switch



Latch in the open position

Designed for Performance

Applications

The Cleaveland/Price ILO-C is a single-phase, hookstick operated disconnect switch for transmission applications. It is a versatile switch that can serve many functions. The switch can be used to sectionalize long transmission lines, disconnect lines from substations, serve as a line tap switch, and serve as a temporary maintenance switch. The ILO-C design saves customers significant installation costs. The switch mounts in line with the transmission line conductor, eliminating the need for a group operated switch with associated mounting structure. The switch allows for easy, cost-efficient sectionalizing of transmission lines and isolation in high voltage substations.



Add switches to disconnect incoming lines at a substation. 230 kV application shown.



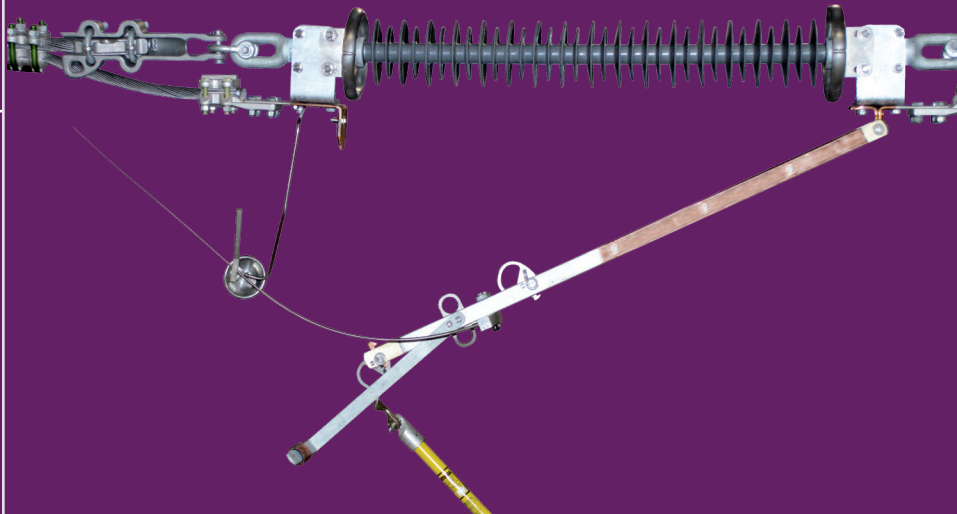
Add a sectionalizing function within the substation where space is limited.



Install the ILO-C with Superwhip™ to sectionalize a transmission line and drop line charging current. 115 kV switch in the open position shown.

Interrupting Line Charging Current

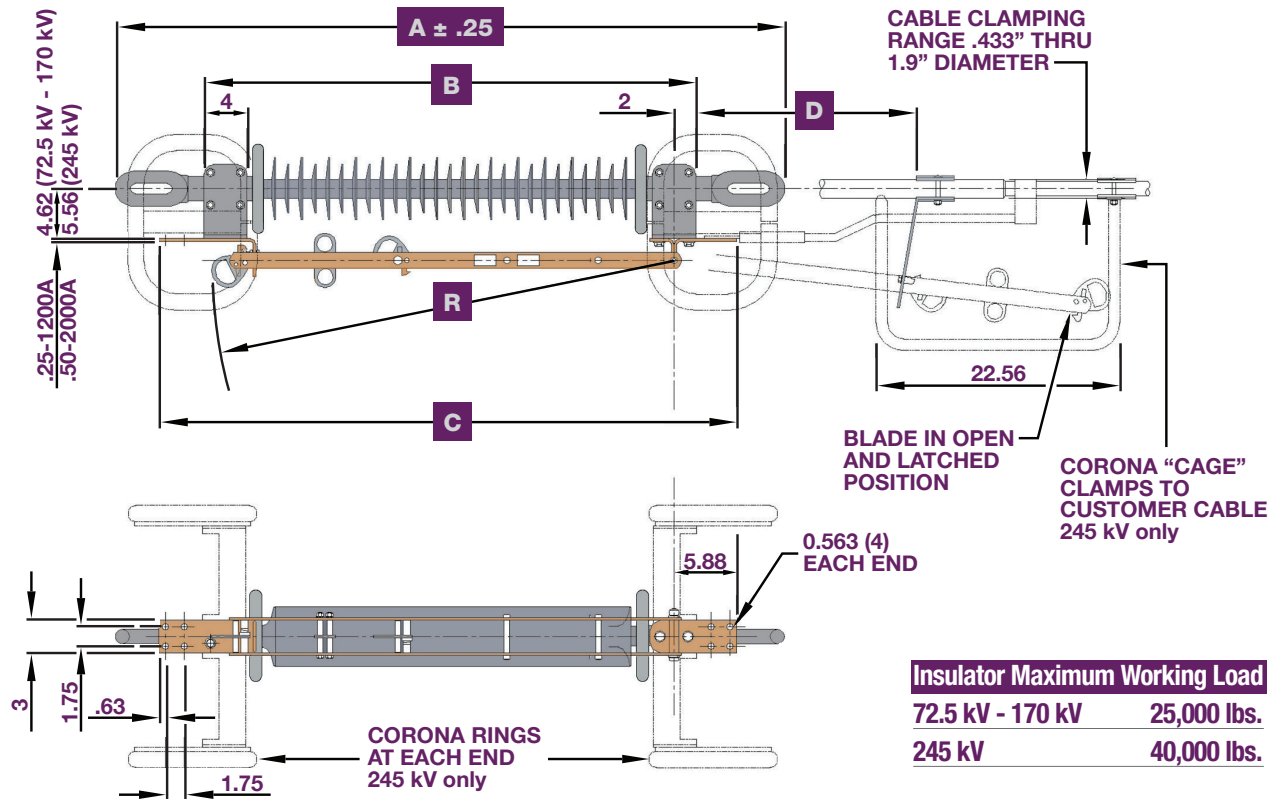
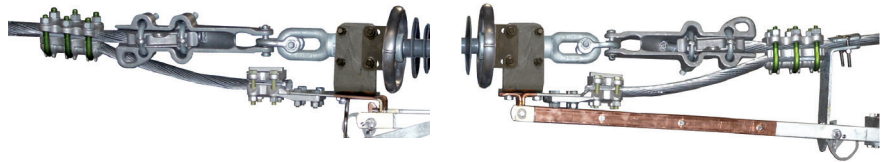
The ILO-C can be supplied with a Cleaveland/Price Superwhip™ up to 161 kV. The Superwhip™ is unsurpassed in its ability to interrupt line-charging current. At 115 kV, it is capable of dropping 45.9A (104 miles) of charging current.



Ratings and Dimensions

Connection

The ILO-C can be installed in the transmission line with a compression connection or a bolted connection as shown in the adjacent photos.



Insulator Maximum Working Load	
72.5 kV - 170 kV	25,000 lbs.
245 kV	40,000 lbs.

	Ratings							Dimensions in Inches						
	Max. kV	kV BIL	Pos. critical flashover Value - kV	Amp.	Momentary kA	Peak kA	Short-Time kA	Style Number	A	B	C	D	R	Wt. lbs
	72.5	350	435	1200	61	99	38	C02A520G01	50.4	37.6	45.25	17	34.75	54
	123	550	672	1200	61	99	38	C02A520G02	64.6	53	60.63	30.18	50.25	64
	145	650	813	1200	61	99	38	C02A520G03	75.2	62.2	69.83	39.31	59.5	70
	170	750	937	1200	61	99	38	C02A520G04	83.5	70.4	78	47.62	67.65	81
	245	1050	1300	1200	61	99	38	C02A027G02	113.6	95.81	103.63	72	92.65	138
	72.5	350	435	2000	100	164	63	C02B007G01	50.4	37.6	45.25	17	34.75	66
	123	550	672	2000	100	164	63	C02B007G02	64.6	53	60.63	30.18	50.25	76
	145	650	813	2000	100	164	63	C02B007G03	75.2	62.2	69.83	39.31	59.5	88
	170	750	937	2000	100	164	63	C02B007G04	83.5	70.4	78	47.62	67.65	93
	245	1050	1300	2000	100	164	63	C02B008G02	113.6	95.81	103.63	72	92.65	162



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This brochure describes a standard product and does not show variations in design that may be available. Contact the factory for additional details.

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