200 A loadbreak elbows

Connectors and accessories

200 A loadbreak connectors and accessories provide a convenient method to connect/disconnect cable and equipment on power distribution systems. Loadbreak elbows include provisions for energized operation using standard hotstick tools, allowing loadmake/break operation and a visible disconnect. Components can be isolated with insulated caps, plugs and parking bushings.

Optional accessories allow system grounding, testing, bypass, surge protection and current limiting fusing. Additional connecting points and taps can be provided by use of junctions or feed-thrus.

Elastimold 200 A loadbreak elbow (15 kV and 25 kV)

Switching made easier

The Elastimold 200 A loadbreak elbow (15 kV and 25 kV series) incorporates decades of innovative design and manufacturing experience that directly addresses end users' needs. The design incorporates safety performance features, increases range flexibility and improves life cycle cost reduction. In addition, Elastimold 200-amp loadbreak elbow has Rural Utilities Service (RUS) acceptance from the U.S. Department of Agriculture (USDA), which authorizes its use in rural infrastructure construction and improvements.

Enhance safety

- Rigid probe support to ensure proper switching
- No stick interface when used with Elastimold bushings (NEETRAC* tested)
- · Robust stainless-steel pulling eye
- Dual grounding eye positions

Increase flexibility

- · Additional sizes available
- · Improved wider cable ranges
- · Easy order system
- · Optional integral jacket seal

Improve life cycle cost reduction

- Optimized for switching operations
- Lifetime ease of operation and non-stick when used with Elastimold bushings
- · Seal system for traditional and jacket seal options

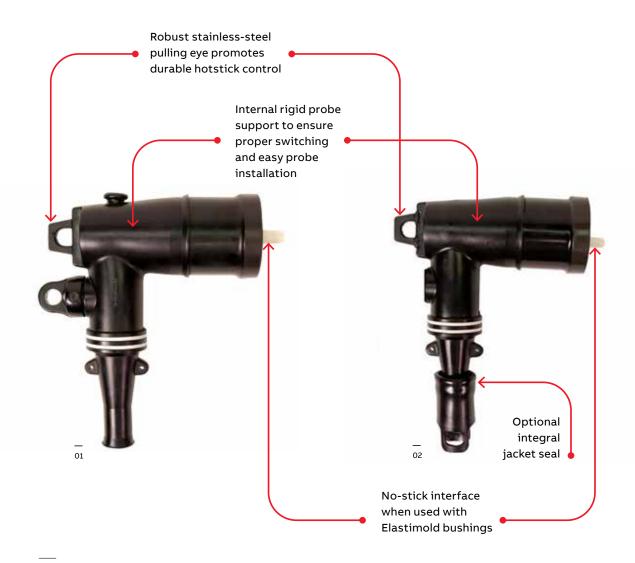
IEEE 386 compliant
ANSI certification
Rural Utilities Service (RUS) acceptance

* National Electric Energy Testing, Research and Applications Center

200 A loadbreak elbows

Overview

01 15/25 kV class — 02 15/25 kV class



Ratings overview

See pages A4–A5 for complete information, including switching and fault close ratings.

Current ratings

- 200 A continuous
- 10 kA sym. 10 cycles

Voltage ratings

- 15 kV class
- 8.3 kV phase-to-ground
- 14.4 kV phase-to-phase
- 95 kV BIL
- 34 kV AC withstand
- 53 kV DC withstand
- 11 kV corona extinction

25 kV class

- 15.2 kV phase-to-ground
- 26.3 kV phase-to-phase
- 125 kV BIL
- 40 kV AC withstand
- 78 kV DC withstand
- 19 kV corona extinction

35 kV class

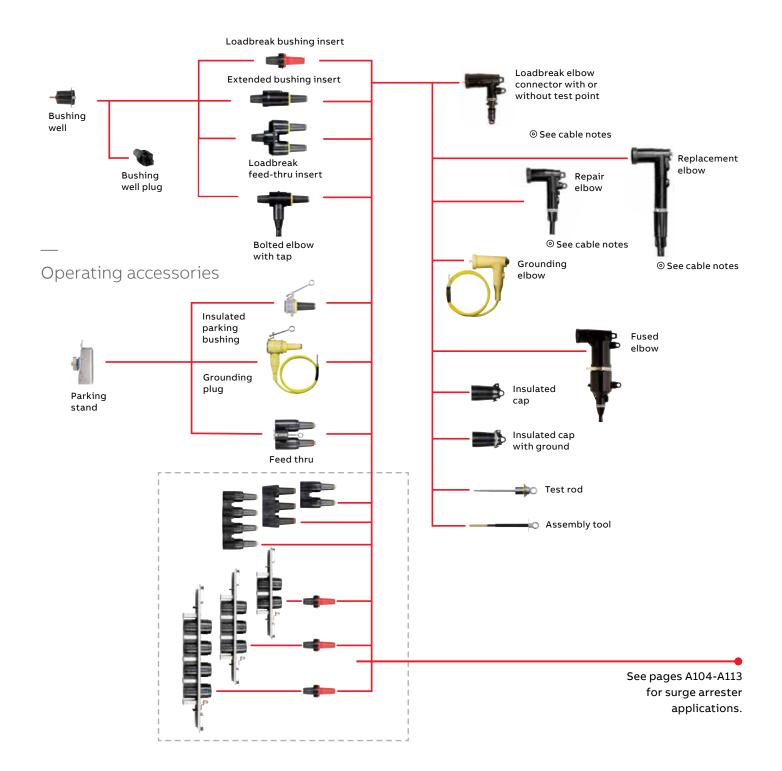
- 21.1 kV phase-to-ground
- 36.6 kV phase-to-phase
- 150 kV BIL
- 50 kV AC withstand
- 103 kV DC withstand
- 26 kV corona extinction

Components

Cable to equipment connections

ABB offers the complete package of underground cable accessories – everything you need to connect, ground, splice, terminate and protect underground

cable from 5 kV to 138 kV – along with solid dielectric switchgear in compact, modular designs that fit easily into tight vaults.



Loadbreak elbows

Image (not to scale)	Description	Voltage class (kV)	Cat. no.	Notes
	Elbow connector without test point	15	161LR-W5X Use tables W1 and X1	N2, 3, 4, 5
T	_	25	261LR-W5X Use tables W1 and X1	N2, 3, 4, 5
		35	375LR-W5X Use tables W3 and X2	N2, 3, 5
	Elbow connector with test point	15	162LR-W5X Use tables W1 and X1	N2, 3, 4, 5, 23
		25	262LR-W5X Use tables W1 and X1	N2, 3, 4, 5, 23
		35	376LR-W5X Use tables W3 and X2	N2, 3, 5, 23
	Jacket seal elbow connector without	15	161LRJS-W5X Use tables W1 and X1	N2, 19
	test point	25	261LRJS-W5X Use tables W1 and X1	N2, 19
	Jacket seal elbow connector with	15	162LRJS-W5X Use tables W1 and X1	N2, 19, 23
	test point	25	262LRJS-W5X Use tables W1 and X1	N2, 19, 23
7	Repair elbow connector	15	167ELR-W5X Use tables W5 and X1	N5, 10, 18
		25	273ELR-W5X Use tables W5 and X1	N5, 10, 18
	Repair elbow connector with	15	168ELR-W5X Use tables W5 and X1	N5, 10, 18, 23
	test point	25	274ELR-W5X Use tables W5 and X1	N5, 10, 18, 23
1	Replacement elbow	15	167RLR-W5X Use tables W4 and X1	N5, 11, 13
		25	273RLR-W5X Use tables W2 and X1	N5, 11, 13
	Replacement elbow with test point	15	168RLR-W5X Use tables W4 and X1	N5, 11, 13, 23
		25	274RLR-W5X Use tables W2 and X1	N5, 11, 13, 23
	Direct test elbow connector	15	161DLR-W5X Use tables W1 and X1	N2, 5, 21
W		25	261DLR-W5X Use tables W1 and X1	N2, 5, 21
7	Direct test repair elbow connector	15	167DELR-W5X Use tables W5 and X1	N5, 10, 18, 21
	_	25	273DELR-W5X Use tables W5 and X1	N5, 10, 18, 21
7	Direct test repair elbow connector with test point	15	168DELR-W5X Use tables W5 and X1	N5, 10, 18, 21, 23
Y		25	274DELR-W5X Use tables W5 and X1	N5, 10, 18, 21, 2

N1. Copper lug for use on COPPER CONDUCTOR ONLY.

N2. W5X indicates that the catalog number includes 02500X long bi-metal compression lug as standard. For an all-copper lug, replace W5X with W2X in Table X1 to specify the all-copper 02702X lug.

N3. Also available as housing only. Specify: 161BLR-W; 261BLR-W; 375BLR-W; 162BLR-W; 262BLR-W; 376BLR-W.

N4. Also available as elbow with insert combination. Specify: 161A4-WX; 261A4-WX; 162A4-WX; 262A4-WX.

 $\textbf{N5.} \ \text{Also available with 200ECS jacket seal included}.$

Add - "S" suffix to catalog number (highly recommended).

N10. Repair elbow has extended length contact and elbow housing resulting in a net gain of 3¼" in length.

N11. Replacement elbow has extended-length contact and elbow housing resulting in a net gain of 8%" in length.

N13. Includes long bi-metal contact 00400X.

N18. Includes 02509X long bi-metal contact.

N19. Includes built-in jacket seal. Also available as housing only – specify: 161BLRJS-W, 162BLRJS-W, 261BLRJS-W or 262LRJS-W. Also available as elbow with insert combination – specify: 161JSA4-W5X, 162JSA4-W5X, 261JSA4-W5X or 262JSA4-W5X.

N21. Direct test connectors, along with a 200TC-X series meter adapter, a properly rated voltage meter and hot-line stick provide a means for direct conductor voltage testing.

 $\textbf{N23.} \ \text{Test point cap catalog number } 156\text{-}7$

Refer to the W and X tables on pages A54–A55 for sizing to cable insulation diameter and conductor size. For cable shield adapters and jacket seals, see pages A44–A45.

Loadbreak bushings

Image (not to scale)	Description	Voltage class (kV)	Cat. no.	Notes
(not to scale)		15	161GP	Notes
	Grounding plug (1/0 AWG x 6'	25		<u>-</u>
	ground lead)		272GP	
	Grounding	15	160GLR	N12
	elbow (1/0 AWG x 6' ground lead)	25/35	370GLR	N12
	Feed-thru	15	164FT	N6, N18
· ·		25	274FT	N6, N18
		35	371FT	N6, N18
		35	373FT	N6, N18
40	Feed-thru	15	164FTV	_
	vertical	25	274FTV	_
-		35	373FTV	_
A A	Adjustable	15	164FT2-AB	N22
	bracket 2-point	25	274FT2-AB	N22
	feed-thru	35	373FT2-AB	N22
0.0.0	Adjustable	15	164FT3-AB	N22
	bracket 3-point	25	274FT3-AB	N22
	feed-thru	35	373FT3-AB	N22
0.0.0.0	Adjustable	15	164FT4-AB	N22
	bracket 4-point	25	274FT4-AB	N22
(10,10,10,10)	feed-thru	35	373FT4-AB	N22
	Feed-thru well	15/25	K1601WFT	_
E	Feed-thru well vertical	15/25	K1601WFTV	-
	Insulated	15	161SOP	N20
-	parking bushing	25	272SOP	N20
		35	372SOP	N20
2	Insulated	15	164SOP	N22
	parking bushing	25	274SOP	N22
	Assembly tool	All	200AT	N8
93	Bushing well	15/25	276BWP	_
-	plug	35	M276BWP	_
	Test rod	All	370TR	-
	Bolted elbow	15	167LRT-W5X	N17
V	with tap		Use tables W4 and X1	
	Bushing insert	15	1601A4	N4, 8
	J *	25	2701A4	N4, 8
-		35	3701A4	N6, 20
		35	3701A4 3701A3	20
			3101A3	20

Image		Voltage		
(not to scale)	Description	class (kV)	Cat. no.	Notes
	Extended	15	1601EA4	N8
	bushing insert	25	2701EA4	N8
	Feed-thru insert	15	1602A3R	N16
		25	2702A1	N16
		35	3702A1	N6, 16
**	Insulated cap	15	160DR	N9
*	Insulated cap with ground	15	160DRG	N9
		15	167DRG	N7, 9
		25	273DRG	N7, 9
		35	375DRG	N7, 9
	Insulated cap with ground	15	168DRG	N7
		25	274DRG	N7
	and test point	35	376DRG	N7

N4. Also available as elbow with insert combination. Specify: 161A4-WX; 261A4-WX; 162A4-WX; 262A4-WX.

N6. Rated for single-phase applications only.

N7. Equipped with insulated cuff.

NB. Includes internal torquing feature using 200AT assembly tool.

NB. Also available without probe. Specify "A" suffix - Example: 273DRGA.

N12. Rated for 25 kV thru 35 kV applications.
N16. Fully rotatable for 360° positioning. Includes bail assembly to secure feed-thru insert to bushing well.

N17. Includes 02800X bi-metal contact.

N18. Includes 02509X long bi-metal contact.

N20. Includes a black vent ring.

N22. With stainless steel bracket.

Refer to the W and X tables on pages A54–A55 for sizing to cable insulation diameter and conductor size. For cable shield adapters and jacket seals, see pages A44–A45.

Connectors and accessories

Connectors and accessories

Image (not to scale)	Description	Voltage class (kV)	Cat. no.	Notes
1 8 8	Contacts: LR long bi-metal	All	Use Table X1 02500X	-
Ĭ	ELR bi-metal	15/25	02509X	N1
	LR copper	All	02702X	N2
1	LRT contact	15	02800X	_
U	RLR contact	15/25	00400X	N3
	Elbow probe	15	166LRF	
	-	35	375LRF	_
	Elbow cable entrance insulating plug	All	10EP-W Use Table W6	_
_	Cable size adapter	15	160CA-W Use Table W6 EB-FA Only	N4
	Direct voltage test meter adapter for: HD electric meters	All	200TC-1	N14
	Ross meters	_	200TC-2	N14
	Chance meters	_	200TC-4	N14
.	2-Way well junction with stainless steel bracket	15/25	K1601WJ2	N6
7	2-Way well junction with "U" straps	15/25	K1601WJ2-5	N5, 6, 11
4	3-Way well junction with stainless steel bracket	15/25	K1601WJ3	N6
	3-Way well junction with "U" straps	15/25	K1601WJ3-5	N5, 6, 12
1	4-Way well junction with stainless steel bracket	15/25	K1601WJ4	N6
	4-Way well junction with "U" straps	15/25	K1601WJ4-5	N5, 6, 13
_	2-Point junction with	15	164J2	N7
	stainless steel bracket	25	274J2	N7
	-	35	373J2	N7
	2-Point junction	15	164J2-5	
	with "U" straps	25	274J2-5	N5, 8 N5, 11
	-	35	373J2-5	N5, 11
	3-Point junction with	15	164J3	N7
J.	stainless steel bracket	25	274J3	N7
	-	35	373J3	N7
	3-Point junction	15	164J3-5	N5, 9
	with "U" straps	25	274J3-5	N5, 12
	-	35	373J3-5	N5, 12
	4-Point junction with	15	164J4	N7
	stainless steel bracket	25	274J4	N7
	-	35	373J4	N7
	4-Point junction	15	164J4-5	N5, 10
200	with "U" straps	25	274J4-5	N5, 13
		35	373J4-5	N5, 13

- $\bf N1.$ Repair elbow has extended-length contact and elbow housing resulting in a net gain of 3% in length.
- N2. Copper lug for use on COPPER CONDUCTOR ONLY.
- $\bf N3.$ Replacement elbow has extended-length contact and elbow housing resulting in a net gain of 8% in length.
- $\bf N4.\,160$ CA cable size adapter can only be used with elbow catalog numbers 165LR/166LR C, H or CC size only.
- N5. Also available as rubber only, without straps.
- Specify suffix "-4" in place of "-5" in the catalog number.
- ${\bf N6.}$ Supplied with replaceable stud. Replacement stud available separately. Specify 1000-150.
- N7. Hardware packages, consisting of brackets and straps only, may be ordered separately by specifying "-6" in the catalog number. Example 16434-6.
- **N8.** Hardware package, consists of "U" straps and back plate only, may be ordered separately by specifying 1601US-J2.
- **N9.** Hardware package, consists of "U" straps and back plate only, may be ordered separately by specifying 1601US-J3.
- **N10.** Hardware package, consists of "U" straps and back plate only, may be ordered separately by specifying 1601US-J4.
- **N11.** Hardware package, consists of "U" straps and back plate only, may be ordered separately by specifying 271-68.
- **N12.** Hardware package, consists of "U" straps and back plate only, may be ordered separately by specifying 271-61.
- N13. Hardware package, consists of "U" straps and back plate only, may be ordered separately by specifying 271-70.
- N14. For use with direct test connectors.

Refer to the W and X tables on pages A54–A55 for sizing to cable insulation diameter and conductor size. For cable shield adapters and jacket seals, see pages A44–A45.