

DuraTite® and Ever-Lok® Locking Connections

Industrial Specification Grade Redefined.

Non-Metallic Self-Locking Plugs, Connectors and Receptacles

From our industry-standard Ever-Lok® series of plugs, connectors and receptacles, Russellstoll® has developed DuraTite® — the first non-metallic, self-locking pin and sleeve power interconnection system. In 20- and 30-amp ranges, DuraTite® mates with existing 15–30A Ever-Lok® receptacles already in use.



Industrial “Safety Grade” Construction

- 20- and 30-amp plugs and connectors (600VAC max.)
- Indoor industrial and heavy-duty use
- Durable, tough and flame safety rated housings
- DuraV® housing material specially selected for hot or cold washdown duty
- Flame safe UL94-V0 rated housings
- Superior performance in corrosive environments
- High-visibility yellow housings































Safe and Reliable Power Connections: Pin and Sleeve, Voltage Polarized

- Long life: Round, self-cleaning, constant-pressure pin and sleeve contacts, of solid CDA 360 brass for long reliable electrical life
- More power, operates cooler: Large circular electrical contact area allows more current flow with lower temperature rise
- Ground pin keyed for voltage polarization (O-ring seal)
- Voltage polarized for safe connection (U-ground) (pins shown with optional O-ring seals)

Easy To Wire

- “No Twist-Off” locking plugs: Integral threaded screw collars and compression-type bushings make wiring a snap
- Fast assembly and wiring: “Drop-In” rear loaded interiors use no assembly screws, versus 3–5 or more with other connectors. 30/50A connectors use unique E-Z Tite™ external gland lock screw
- Set-screw terminals: Are quick and easy to wire, with complete wire capture in deep pin/sleeve barrels

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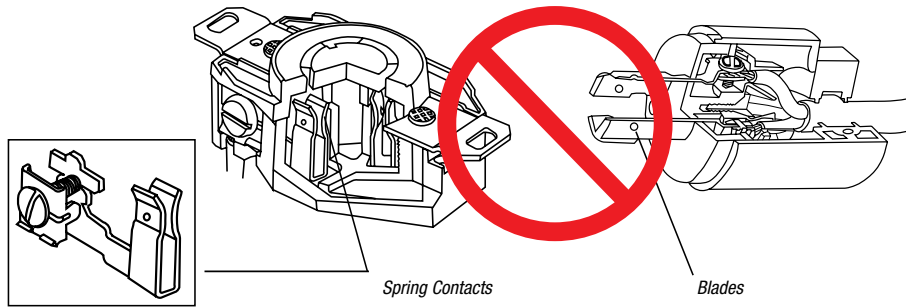
@ 250V AMPS	VOLTAGE	FACE RECEP./ CONN.	CAT. NOS.						
			PLUG		CONNECTOR		STD. I.D. BUSHING: PLUG/ CONN.*	RECEPTACLE — EVER-LOK®	
									
DURATITE®	EVER-LOK®	DURATITE®	EVER-LOK®						
2P3W 20A	125VAC		5P23U1LD	8013U1 8153U1 8593U1	5C23U1LD	8023U1 8093U1 8683U1	.625	8003U1	8083U1
	250VAC		5P23U2LD	8013U2 8153U2 8593U2	5C23U2LD	8023U2 8093U2 8683U2	.625	8003U2	8083U2
	277		5P23U3LD	8013U3 8153U3 8593U3	5C23U3LD	8023U3 8093U3 8683U3	.625	8003U3	8083U3
	480		5P23U4LD	8013U4 8153U4 8593U4	5C23U4LD	8023U4 8093U4 8683U4	.625	8003U4	8083U4
	600		5P23U5LD	801345 8153U5 8593U5	5C23U5LD	8023U5 8093U5 8683U5	.625	8003U5	8083U5
	through 600 (all)		5P23U0LD	8013 8153 8593	5C23U0LD	8023 8093 8683	.625	8003N	8083N
2P3W 30A	125VAC		5P33U1LD	—	5C33U1LD	—	.700	NA	NA
	250VAC		5P33U2LD	—	5C33U2LD	—	.700	NA	NA
	277VAC		5P33U3LD	—	5C33U3LD	—	.700	NA	NA
	480VAC		5P33U4LD	—	5C33U4LD	—	.700	NA	NA
	600VAC		5P33U5LD	—	5C33U5LD	—	.700	NA	NA
	through 600 (all)		5P33U0LD	8015 8155 8656	5C33U0LD	8025 8095 8646	.700	8030N	8005N
3P4W 20A (10A, 600V)	125/250VAC		5P24U1LD	—	5C24U1LD	—	.625	NA	NA
	3Ø 250VAC		5P24U2LD	—	5C24U2LD	—	.625	NA	NA
	3Ø 480VAC		5P24U4LD	—	5C24U4LD	—	.625	NA	NA
	347/600VAC		5P24U5LD	—	5C24U5LD	—	.625	NA	NA
	through 600 (all)		5P24U0LD	8018 8158 8594	5C24U0LD	8028 8098 8684	.625	8008	8084
3P4W 30A (20A, 600V)	125/250VAC		5P34U1LD	—	5C34U1LD	—	.750	NA	NA
	3Ø 250VAC		5P34U2LD	—	5C34U2LD	—	.750	NA	NA
	3Ø 480VAC		5P34U4LD	—	5C34U4LD	—	.750	NA	NA
	347/600V		5P34U5LD	—	5C34U5LD	—	.750	NA	NA
	through 600 (all)		5P34U0LD	8014 8154 8597 8657	5C34U0LD	8024 8094 8687 8647	.750	8031	8004

Note: DuraTite® plugs and connectors will mate but not lock to metal plugs and connectors referenced above. DuraTite® will lock to existing metal receptacles, from standard Ever-Lok® line.

DuraTite® and Ever-Lok® Locking Connections

Bladed Plug and Receptacle

Spring-blade contact designs offer point contact only, with minimal mechanical support in receptacles. Higher heat is generated with use as contacts loosen due to age and dirt accumulation, resulting in failures. Exposed blade contacts can easily be damaged.



Performance — Electrical

Dielectric Voltage Withstand	3000 volts
Max. Working Voltage	6000 volts RMS (minimum creepage and minimum clearance per UL 840)
Circuit Interrupting/Load Breaking	UL Listed and CSA Certified for circuit interrupting at full rated current
Temperature Rise	Max. 30° C temperature rise at full rated current after 50 cycles of overload at 150% rated current at .75 pF
Horsepower	Per NEC® 430-151 ratings

Performance — Mechanical

Impact Resistance	Per UL 1682 Paragraph 34
Cord Accommodation	Round portable service cords; 10 standard diameters from .405" to 1.00", custom sizes to spec
Terminal Identification	In accordance with UL 1682
Cable Pull-Out Force	In accordance with UL 1682
Product Identification	Identification label and molded-in name

Approvals

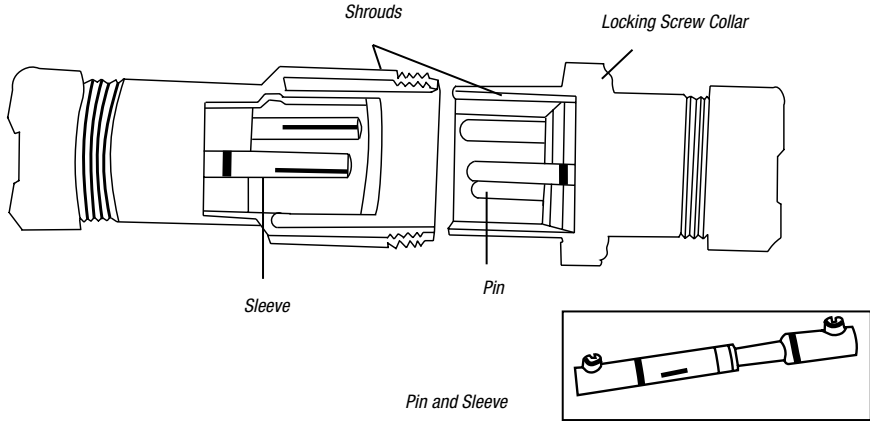


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DuraTite® and Ever-Lok® Locking Connections

Pin and Sleeve Connector and Plug

Pin and Sleeve design enables higher current flow at cooler temperatures due to the large circular contact area. Sleeves act as retainers for the pins, making a reliable connection. Shrouded pins and sleeves are protected from damage and casual access. Locking screw collars provide for a reliable, long-lasting connection.



Performance — Environmental

Moisture Resistance

Per UL 1682 Paragraph 49. Flap cover on receptacle, O-rings optional on all pins, sleeves and interiors. Watertight interiors with optional O-rings. Meets requirements for NEMA 3R/12 and IP44

Flammability
Operating Temperatures

V0 or better per UL 94
Maximum continuous: 95° C/203° F
Minimum: -40° C/-40° F without impact

Chemicals

Resists standard industrial hydrocarbons, acids, bases and solvents

Material

Contact Carrier Interior

Molded arc-resistant UL 94-V0 phenolic thermoset

Housing, Gland Nuts

DuraV® UL 94-V0, high impact

Screw Collar Rings

Thermoplastic

O-Rings

Buna-N (Nitrile)

Contacts: Pins and Sleeves

Brass CDA 360

Terminals

Brass CDA 360

All Hardware

Stainless steel

Gland Friction

20 Amp — Nylon

Washer

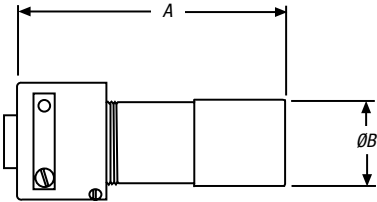
30 and 50 Amp — Aluminum

Cable Clamp Bushing

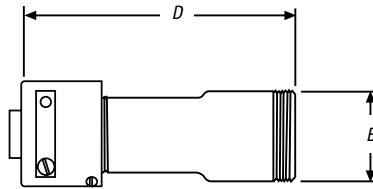
Neoprene

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Plugs



Connectors



Receptacles

DuraTite® mates and locks to standard Ever-Lok® (see [page H-416](#)).

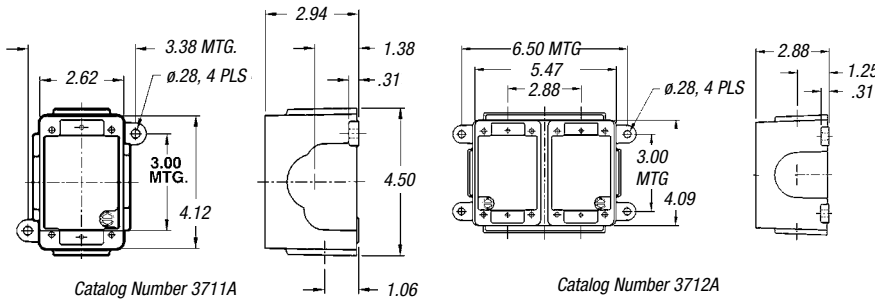
AMPS		A*	ØB	C*	ØD
20A	inches	3.87	1.53	4.40	1.79
	mm	98.3	38.9	111.8	45.5
30A	inches	6.00	1.79	6.25	2.05
	mm	152.4	45.5	158.8	52.1

* Dimensions will vary slightly with assembly.

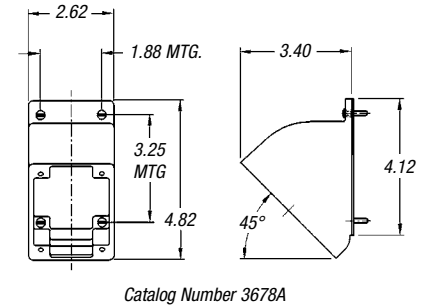
Accessories

Additional Boxes and Accessories Available: Ever-Lok® Section

Conduit Boxes (For Surface Mounting)



45° Angle Adapter



	CAST ALUMINUM	CAST BRASS
Single	3711A	3731
Double	3712A	3732

CAST ALUMINUM	CAST BRASS
3678A	3678B

Note: ¼" NPT Hole standard.

Additional accessories are available. Consult your Thomas & Betts representative.