

DuraGard waterproof connections

Plugs, connectors and receptacles



Materials

Part	Material
Contact carrier interior	Molded arc-resistant UL 94-V0 phenolic thermoset
Housing, gland nuts, screw collar rings	DuraV UL 94-V0, high-impact thermoplastic
O-rings	Buna-N (nitrile)
Contacts: pins and sleeves	Brass CDA 360
Hinge pins (receptacle)	Stainless steel
Terminals	Brass CDA 360
Terminal screws, flap springs, assembly screws, nuts, hardware	Stainless steel
Gland friction washer	20 A – nylon 30, 50 and 60 A – aluminum
Cable clamp bushing	Neoprene

Approvals



* TUV & PSE listed product also available; contact Technical Services.

Performance – Electrical

Application	Performance
Dielectric voltage withstand	3000 V
Max. Working voltage	6000 V RMS (minimum creepage distance 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/86 °F temperature rise at full rated current after 50 cycles of overload at 150% rated current at 0.75 pf

Performance – Mechanical

Application	Performance
Impact resistance	Per UL 1682 paragraph 34
Cord accommodation	Round portable service cords. 10 standard diameters from 0.405" 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
Lockout/tagout	Lockout/tagout hole on plug complies with OSHA Reg. 29 CFR 1910.147

Performance – Environmental

Application	Performance
Moisture resistance	Per UL 1682 paragraph 49 watertight/flap screw cover on receptacle, O-rings on all pins and sleeves, interiors and plug shell. Watertight even when not engaged
Flammability	V0 or better per UL 94
Operating Temperatures	Maximum continuous: 95 °C/203 °F Minimum: -40 °C/-40 °F without impact
Chemicals	Resists standard industrial hydrocarbons, acids, bases and solvents
UV resistance	UV resistant housing per UL 746C

DuraGard waterproof connections

Safety interlocks

Performance – Electrical

Application	Performance
Dielectric voltage withstand	3000 V
Max. Working voltage	480 V RMS (minimum creepage distance and minimum clearance per UL 840) (using circuit breaker)
Circuit interrupting/ load breaking	UL listed and CSA certified for circuit interrupting at full rated current
Temperature rise	Max. 30 °C/86 °F temperature rise at full rated current after 50 cycles of overload at 150% rated current at 0.75 pf
Shrouded contacts	Complies with California Code Title 8, Art. 51, S2510.7(b) for devices exceeding 300 V AC

Performance – Mechanical

Application	Performance
Impact resistance	Per UL 1682 Paragraph 34
Wiring accommodation	Conduit entries at top, side and bottom, 0.750" NPT top entry standard
Terminal identification	In accordance with UL 1682
Plug pull out force	In accordance with UL 1682
Product identification	Identification label
Lockout/tagout	Lockout/tagout access on switch complies with OSHA Reg. 29 CFR 1910.147

Performance – Environmental

Application	Performance
Moisture resistance	Per UL 1682 Paragraph 49. Watertight/ flap screw cover on receptacle, O-rings on all pins and sleeves, interiors and plug shell. Watertight even when not engaged (screw cover closed/locked)
Flammability	V0 or better per UL 94
Operating Temperatures	Maximum continuous: 95 °C/203 °F Minimum: -40 °C /-40 °F without impact (Note: per C/B trip at elevated temps.)
Chemicals	Resists standard industrial hydrocarbons, acids, bases and solvents
UV resistance	UV-resistant housing per UL 746C

Materials

Part	Material
Contact carrier interior	Molded arc-resistant UL 94-V0 thermoset material
Housing, gland nuts, screw collar rings	DuraV UL 94-V0, high-impact Thermoplastic
O-rings	Buna-N (Nitrile)
Contacts: pins and sleeves	Brass CDA 360
Hinge pins (receptacle)	Stainless steel
Terminals	Brass CDA 360
Terminal screws, flap springs, assembly screws, nuts, hardware	Stainless steel
Gland friction washer	20 A – nylon 30, 50 and 60 A – aluminum
Cable clamp bushing	Neoprene

Approvals

