

Q: WHAT IS THE UL TESTING PROTOCOL IN SEQUENCE FOR SIMPush™?**A:** UL 514B Sequence Testing on Couplings and Connectors

- 8.11 Thread-less Fittings for Non-Flexible Metallic Raceway Sequence
- Assembly Test, Clause 8.11.3 Followed by the Resistance Test
- Resistance Test, Clause 8.11.4 Followed by the Bend Test
- Bend Test, Clause 8.11.5 Followed by a Repeated Resistance Test
- Repeated Resistance Test, Clause 8.11.6 Followed by a Pull Test
- Pull Test, Clause 8.11.7. (Please see Table 24), including a Current test
- Current Test: 8.10 to Determine the Connection has Maintained its Continuity

Q: WHAT IS THE UL/CSA TESTING PROTOCOL AND LISTING FOR NEMA 4X?**A:** UL 50 CSA C22.2 No. 94.2 – 15: Enclosures for Electrical Equipment, Environmental Considerations UL50E NEMA 4X Testing and Testing to IP 66: NEMA 4X Testing includes the following protocols:

- External Icing Test, Clause 8.5
- Hose Down Test, Clause 8.6

Q: WHAT IS THE IP 66 RATING AND LISTING UNDER IEC 60529 DEGREES OF PROTECTION PROVIDED BY THE ELECTRICAL ENCLOSURES (IP CODE)?**A:** Dust Tight Test for IP Code IPX6, Clause 13.4, Water Spray (Powerful Jetting) Test for IP Code IPX6: Clause 14.2.6.**Q: WHAT DOES THE TYPE 4X SIMPush™ TESTING, LISTING AND CERTIFICATION MEAN?****A:** Enclosures are constructed either for indoor or outdoor use to provide a degree of protection to personnel against access to hazardous parts; to provide a degree of protection against ingress of solid foreign objects (falling dirt and windblown dust); to provide a degree of protection with respect to harmful effects on the equipment due to ingress of water (rain, sleet, snow, splashing water, and hose-directed water); that provides an increased level of protection against corrosion; and that will be undamaged by the external formation of ice on the enclosure.

PRODUCT APPROVALS AND CERTIFICATIONS

Our SIMPush™ push-on electrical products are tested, certified and listed to the 514A, 514B, UL 50E, NEMA 4X, IP66 and CSA C22.2 No. 18.3-12 standards. While the SIMPush™ connection technology has been tested under Underwriter Laboratories “UL” New and Innovative standards, all of the certification testing was the same as required to approved conventional threaded unions, following the same testing protocol as threaded technology outlined in UL514B.

INSPECTOR LISTING INFORMATION

Q: WHAT STANDARDS IS THE SIMPush™ CONNECTION LISTED FOR?

A: UL514B/CSA C22.2 No. 18.3 – 12: Evaluation Standard for Conduit, Tubing and Cable Fittings UL514A Metallic Outlet Boxes.

Q: IS SIMPush™ LISTED FOR THREAD LESS AND THREADED APPLICATIONS?

A: Yes. SIMPush™ is UL, CSA approved and listed for both threaded and thread-less applications. UL investigations and testing were conducted assuming the “SIMPush™” thread-less fittings are used on threaded and nonthreaded AL and FE RMC and IMC. NEC 344.42 states that thread-less connectors cannot be used on threaded ends unless listed for the purpose. The UL514B Sequencing Test as outlined below follows the identical protocol when testing either threaded or nonthreaded conduit of which both can be connected to the “SIMPush™” thread-less fitting. Engineering considerations were for the following UL Standards 514B, CSA 22.2 No. 18. 3-12 and 514B.

BENDING LOAD AND PULL FORCE FOR THREAD LESS FITTINGS (SEE CLAUSES 8.11.5.2 AND 8.11.7.1)

Trade Size of Fittings	Metric Designator	Bending Load				Pull force for EMT, IMC or RIGID	
		EMT		IMC & RIGID		N	(lbf)
		kg.	(lb)	kg.	(lb)		
3/8"	12	6.7	15	13.3	30	890	200
1/2"	16	8.9	20	26.7	60	1334	300
3/4"	21	15.6	35	35.6	80	2002	450
1"	27	22.7	50	53.4	120	2668	600
1-1/4"	35	33.3	75	71.2	160	3114	700
1-1/2"	41	37.8	85	71.2	160	3559	800
2"	53	48.9	110	71.2	160	4450	1000
2-1/2"	63	48.9	110	71.2	160	4450	1000
3"	78	48.9	110	71.2	160	4450	1000
3-1/2"	91	48.9	110	71.2	160	4450	1000
4"	103	48.9	110	71.2	160	4450	1000