INSTAGLIDE® RW90 (–40°C) XLPE Insulated Wire 90°C

1 kV Aluminum

Nexans ref.: RW90

INSTAGLIDE® RW90 (–40°C) EXELENE® XLPE 1 kV Aluminum Service Entrance and Branch Circuit Wire

Description

CSA File #L23462 Class 5832 03.

Compact stranded AA-8000 series aluminum conductor material (ACM) per ASTM B801 Class B or ASTM B836 (Single Input Wire) with low temperature moisture resisting EXELENE® cross-linked polyethylene (XLPE) insulation. RoHS compliant.

Standards

National CSA C22.2 N° 38

Application

For open wiring and raceways (except cabletroughs and ventilated flexible cableway) in dry or wet locations.
For exposed wiring where exposed to weather with sunlight resistant insulation. Standard Black 6 AWG and larger is sunlight resistant and marked "SR"; coloured insulation is *NOT*.
Minimum recommended installation temperature minus 40°C (with suitable handling procedures).
Maximum conductor temperature 90°C.
Approved for use with ceiling fixtures. Nexans INSTAGLIDE® reduced friction construction in sizes 6 AWG and larger, black and colours.

Characteristics

Construction characteristics	
Conductor material	Aluminum
Usage characteristics	
Maximum operating temperature	90 °C

INSTAGLIDE® RW90 (–40°C) XLPE Insulated Wire 90°C

1 kV Aluminum

Nexans ref.: RW90

RW90 1 kV Aluminum

Size AWG or kcmil	Insulation Thickness		Nominal Diameter		Approximate Net Cable Weight		Ampacity (Note 5) (A) 30°C Ambient					
							Free Air (Note 2)			Conduit (Note 3)		
	mm	in	mm	in	kg/km	lbs/kft	60ºC	75ºC	90ºC	60ºC	75ºC	90ºC
6 (7)	1.52	0.060	7.4	0.29	64	43	65	75	85	40	50	55 (Note 4)
4 (7)	1.52	0.060	8.6	0.34	91	61	85	100	115	55	65	75
3 (7)	1.52	0.060	9.1	0.36	108	73	95	115	130	65	75	85
2 (6)	1.52	0.060	9.9	0.39	131	88	115	135	150	75	90	100
1 (8)	2.03	0.080	11.7	0.46	177	119	130	155	175	85	100	115
1/0 (10)	2.03	0.080	12.7	0.50	213	143	150	180	205	100	120	135
2/0 (12)	2.03	0.080	13.7	0.54	257	173	175	210	235	115	135	150
3/0 (16)	2.03	0.080	15.0	0.59	312	210	200	240	270	130	155	175
4/0 (18)	2.03	0.080	16.2	0.64	384	258	235	280	315	150	180	205
250 (35)	2.28	0.090	17.8	0.70	475	307	265	315	355	170	205	230
300 (35)	2.28	0.090	19.1	0.75	536	360	295	350	395	195	230	260
350 (35)	2.28	0.090	20.3	0.80	614	413	330	395	445	210	250	280
400 (35)	2.28	0.090	21.3	0.84	692	465	355	425	480	225	270	305
500 (35)	2.28	0.090	23.4	0.92	844	567	405	485	545	260	310	350
600 (58)	2.28	0.090	25.1	0.99	997	670	455	545	615	285	340	385
750 (58)	2.28	0.090	27.7	1.09	1223	822	520	620	700	320	385	435
1000 (58)	2.28	0.090	31.5	1.24	1600	1075	630	750	845	375	445	500

Notes:

1) Where stated, "nominal" and "approximate" values are provided for information purposes only and are subject to standard manufacturing tolerances.
2) Based on CE Code Table 3, for single conductors in free air.
3) Based on CE Code Table 4, for not more than 3 current carrying conductors in a cable or raceway.
4) For 3-wire 120/240 V and 120/208 V residential services or sub-services the allowable ampacity for 6 AWG shall be 60 amperes. In this case, the 5% adjustment Rule (CE Code Rule 8-106(1)) cannot be applied.
5) The maximum conductor temperature (used to determine the maximum conductor ampacity) shall be based on the lowest temperature rating of the electrical equipment, any wire connector, or cable (CE Code Rule 4-006).

Selling information

Colours: Standard colours are available.

Non-jacketed RW-90 (XLPE) cables are not suitable for installation in vaults and switchrooms under the conditions of C.E. Code Part 1 Rule 12-2202(3). Suitable flame retardant jacketed cables are available on request.