

Royal® EXCELENE® NON-UL WELDING CABLE

600 Volt 105°C Flexible Cord. Heat, Abrasion, Tear Resistant, Moisture and Oil Resistant Flexible EPDM Jacket.

APPLICATIONS

Southwire Excelene Welding cable, Extra Flexible, rated for -50°C to 105°C temperatures. This cable used for secondary voltage resistance welding cable leads, National electrical code Article 630 electric welders and for temporary power industrial applications.

SPECIFICATIONS

- RoHS-2 (European Directive 2011/65/EU)

CONSTRUCTION

1. Conductors: Fully annealed stranded bare copper
2. Insulation: EPDM, Black (Other colors available upon request)

SAMPLE PRINT LEGEND Cond. Size in KCMIL

SOUTHWIRE® ROYAL® EXCELENE® XXX KCMIL (XXXmm²) WELDING CABLE 600V -50C TO +105C MADE IN USA

SAMPLE PRINT LEGEND Cond. Size in mm²

SOUTHWIRE® ROYAL® EXCELENE®(SIZE) (XXmm²)WELDING CABLE 600V -50C TO +105C MADE IN USA

PACKAGING

Standard lengths: 250', 500' and 1,000' reels. Other lengths available upon request.



The Power of Connections.™



Southwire®

Royal® EXCELENE® NON-UL WELDING CABLE

600 Volt 105°C Flexible Cord. Heat, Abrasion, Tear Resistant, Moisture and Oil Resistant Flexible EPDM Jacket.



TABLE 1 - WEIGHTS & MEASUREMENTS

Stock Code	Cond. Size	No. of Cond.	No. of Strands	Insulation Thickness (Inchs)	Insulation Thickness (mm)	Nominal OD (Inchs)	Nominal OD (mm)	Nominal Weight (Lbs/Mft)	Nominal Weight (kg/km)	Nom. DCR Ω/1M'
† 10410	8 mm ²	1	168	0.070	1.778	0.285	7.239	86	128	0.65
††† F25001	250 MCM (AWG)	1	2451	0.148	3.759	0.875	22.225	110	163	0.04316
††† F35003	350 MCM (AWG)	1	3458	0.137	3.480	0.975	24.765	148	221	0.0323
††† F50001	500 MCM (AWG)	1	4921	0.160	4.064	1.150	29.210	210	313	0.0226

TABLE 2 - WEIGHTS & MEASUREMENTS

Stock Code	Cond. Size mm ²	No. of Cond.	No. of Strands	Insulation Thickness (Inchs)	Insulation Thickness (mm)	Nominal OD (Inchs)	Nominal OD (mm)	Nominal Weight (Lbs/Mft)	Nominal Weight (kg/km)	Nom. DCR Ω/1M'
†† 10411	13mm ²	1	259	0.065	1.651	0.305	7.747	111	165	0.44
†† 10412	19mm ²	1	385	0.060	1.524	0.340	8.636	154	229	0.3
†† 10413	32mm ²	1	651	0.070	1.778	0.420	10.668	259	385	0.17
†† 10414	40mm ²	1	798	0.084	2.134	0.498	12.649	329	490	0.141
†† 10415	50mm ²	1	1026	0.085	2.159	0.525	13.335	396	589	0.112
†† 10416	62mm ²	1	1254	0.084	2.134	0.570	14.478	467	695	0.09
†† 10417	81mm ²	1	1615	0.093	2.362	0.635	16.129	609	906	0.064
†† 10418	103mm ²	1	2052	0.083	2.108	0.695	17.653	746	1110	0.06

TABLE 3 - ELECTRICAL AND ENGINEERING DATA

Δ Current Amps	RECOMMENDED MINIMUM WELDING CABLE SIZING CHART						
	50 FT	100 FT	150 FT	200 FT	250 FT	300 FT	350 FT
100	4	4	4	2	2	1	1/0
150	4	4	2	1	1/0	2/0	3/0
200	2	2	1	1/0	2/0	3/0	4/0
250	2	2	1/0	2/0	3/0	4/0	
300	1	1	2/0	3/0	4/0		
350	1/0	1/0	3/0	4/0			
400	2/0	2/0	3/0				
500	3/0	4/0	4/0				
600	4/0	4/0					

Δ Current Amps	RECOMMENDED MINIMUM WELDING CABLE SIZING CHART						
	15 Meter	30 Meter	46 Meter	61 Meter	76 Meter	91 Meter	107 Meter
100	4	4	4	2	2	1	1/0
150	4	4	2	1	1/0	2/0	3/0
200	2	2	1	1/0	2/0	3/0	4/0
250	2	2	1/0	2/0	3/0	4/0	
300	1	1	2/0	3/0	4/0		
350	1/0	1/0	3/0	4/0			
400	2/0	2/0	3/0				
500	3/0	4/0	4/0				
600	4/0	4/0					

All dimensions are nominal and subject to nominal manufacturing tolerances

Δ Ampacities are based on 105°C conductor temperature, 40°C ambient air / 50% duty cycle and approximate voltage drop of 4V @ 25°C conductor temperature or 5VB @ 105°C conductor temperature.

- † Copper SAE J1128
- †† Copper SAE J1127
- ††† Copper UL 1581

The Power of Connections.™

