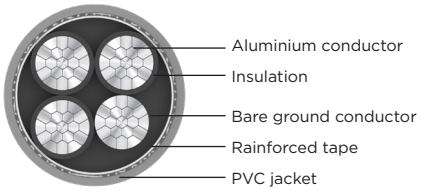
POLYCAB ALUMINIUM SE STYLE R CABLE

INDUSTRIAL CABLE, 600 V AC



SPECIAL FEATURES

- Heat resistant
- Sunlight resistant
- Moisture resistant
- Halogen free

APPLICATION

POLYCAB Aluminium SE Style R cable is recommended to use in transmitting power from service point to the meter and to the distribution panel board. Further, it is applicable to all type of SE cable requirements. SER may be used in wet or dry locations above the ground at ambient temperature not to exceed 90°C.

VOLTAGE RATING

600 V

OPERATION TEMPERATURE

-40°C to +90°C

CONSTRUCTION

- AA-8000 series stranded compacted Aluminium Alloy conductor as per ASTM B-801
- Accompanied with bare grounding conductor
- Insulated with a sunlight resistant Type XHHW-2 or Type THHN/THWN-2 to UL 44 or UL 83 respectively.
- A reinforced tape is applied over the conductors for additional strength
- Sunlight resistant PVC jacket over the complete assembly

CORE IDENTIFICATION

Phase conductors are identified by a coloured stripes on the insulation

Number of conductors	Colour sequence 120/208Y
3	Black, Black with Red stripe plus Bare ground
4	Black, Black with White stripe, and Black with Red stripe plus Bare ground
5	Black, Black with White stripe, Black with Red stripe, and Black with Blue stripe plus Bare ground

BENDING RADIUS

12 x Overall Diameter

STANDARD AND REFERENCES

UL 44
UL 83
ASTM B-801
UL 854
National Electrical Code/NFPA 70,2011 Edition

A-C SPARK TEST

As per UL 44

COMPLIANCE

Conductor resistance test	ASTM B-801
Insulation resistance	UL 44
Cold bend test	UL 44
Flame test	UL 1581
Vertical tray flame test	UL 854
RoHS	
REACH	

UL LISTED

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No. of core	Conductor size	Insulation thickness	Nominal overall diameter	Approximate weight per 1000ft
	AWG or kcmil	mils	mils	lbs
SER Aluminium Two conductor with Bare ground (Formerly referred as "Three conductor")				
3	6-6-6	45	591	142
3	4-4-4	45	674	196
3	4-4-6	45	674	183
3	2-2-2	45	791	282
3	2-2-4	45	791	259
3	2/0-2/0-1	55	898	445
3	2/0-2/0-2/0	55	898	491
3	4/0-4/0-2/0	55	1263	692
3	4/0-4/0-4/0	55	1263	764
3	4/0-4/0-4/0	55	1447	2307
SER Aluminium Three conductor with Bare ground (Formerly referred as "Four conductor")				
4	8-8-8-8	45	554	135
4	6-6-6-6	45	633	185
4	4-4-4-6	45	727	243
4	2-2-2-4	45	848	345
4	1-1-1-3	55	966	437
4	1/0-1/0-1/0-2	55	1036	524
4	2/0-2/0-2/0-1	55	1122	629
4	3/0-3/0-3/0-1/0	55	1223	765
4	4/0-4/0-4/0-2/0	55	1336	931
4	250-250-250-3/0	65	1501	1127
4	300-300-300-4/0	65	1608	1324
SER Aluminium Four conductor with Bare ground (Formerly referred as "Five conductor")				
5	2-2-2-2-4	45	942	433
5	2/0-2/0-2/0-2/0-1	55	1249	795
5	4/0-4/0-4/0-4/0-2/0	55	1488	1179
5	250-250-250-250-3/0	65	1673	1426
5	300-300-300-300-4/0	65	1793	1674

ELECTRICAL CHARACTERISTICS

Allowable ampacity and DC resistance.

Conductor size AWG	*Allowable ampacity Amp			Maximum DC resistance at 20°C
	60°C	75°C	90°C	Ω/km
8	35	40	45	3.4464
6	40	50	60	2.1684
4	55	65	75	1.3633
2	75	90	100	0.8573
1	85	100	115	0.6798
1/0	100	120	135	0.5387
2/0	115	135	150	0.4275
3/0	130	155	175	0.3389
4/0	150	180	205	0.2690
250	170	205	230	0.2277
300	195	230	260	0.1896

*Allowable ampacities shown are for general use as specified by the NEC 2011 Edition Section 310.16.
60°C – When terminated to equipment for circuit rated 100 ampere or less or marked for 14 through 1AWG conductor.
75°C – When terminated to equipment for circuit rated 100 ampere or less or marked for 14 through 1AWG conductor.
90°C – wet or dry locations for ampacity derating purposes