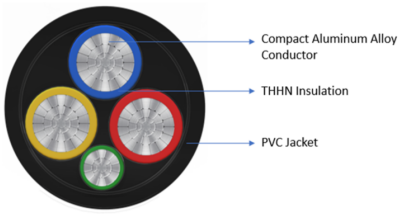
POLYCAB ALUMINIUM TYPE TC THHN/THWN-2 CABLE
Industrial Cable, 600 V AC



Images not to scale. Follow table for dimensions

APPLICATION

POLYCAB Aluminium Type TC THHN/THWN-2 cable is recommended to use in commercial as well as industrial application as power, control, signal, communication and lighting cable. It is suitable to install in cable tray and also in open air, raceway, channel, conduit and duct. Further, it may be installed in direct burial or sunlight exposed area and also in wet or dry location or in area exposed to chemical or oil.

CHARACTERISTICS

Voltage Rating
600 V

Operation Temperature
-25°C to 90°C

CONSTRUCTION

- AA 8000 series Stranded Compacted Aluminium Alloy conductor as per ASTM B 801
- Accompanied with grounding conductor as per ASTM B 801
- Insulated with a flame retardant PVC/Nylon, Type THHN/THWN-2 as per UL 83
- Cores laid up to form a round shape.
- Sunlight resistant PVC jacket, rated 90°C wet and dry, as per UL 1277, over the complete assembly. Colour : Black
- Ripcord provided for jacket with thickness of 60mils or less.

Core Identification

No.	Colour
2	Red/Yellow
3	Red/Yellow/Blue
4	Red/Yellow/Blue/Black
Ground	Green

Bending Radius
12 x Overall Diameter

OUTSTANDING FEATURES

- Heat resistant
- Sunlight resistant
- Oil resistant
- Chemical resistant
- Flame retardant

STANDARD FOLLOWS

ASTM B 801
UL 83
UL 1277
ICEA S-95-658
UL 1685
CSA C22.2 No. 230

COMPLIANCE

Conductor resistance test	ASTM B801
Insulation resistance	UL 83
Vertical tray flame test	UL 1685
FT4 Test (For 1/0 AWG and above)	UL 1685, IEEE 1202
Oil resistant test (PR I)	UL 1277
RoHS & REACH	

OUR ACCREDITATIONS

APPROVAL

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Industrial Cable, 600 V AC

POLYCAB
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Dimensional Characteristics:

No. of core	Conductor size	Insulation thickness	Ground wire size	Approximate overall diameter	Approximate weight
	kcmil	mils	AWG/ Kcmil	mils	lbs/ 1000 ft
3	250	60	1	1812	1445
4	500	60	2/0	2522	3133
3	350	60	4/0	2027	1949
4	500	60	4/0	2565	3248
3	500	60	250	2330	2556
3	500	60	400	2426	2738

*Above values are approximate and subject to standard manufacturing tolerance

Electrical characteristics

Conductor Size	*Allowable ampacity (Amp.)			Maximum DC resistance at 20°C
AWG	60°C	75°C	90°C	Ω/km
1/0	100	120	135	0.550
2/0	115	135	150	0.436
3/0	130	155	175	0.346
4/0	150	180	205	0.274
250	170	205	230	0.232
300	195	230	260	0.194
350	210	250	280	0.166
400	225	270	305	0.145
500	260	310	350	0.116

*Allowable ampacities shown are for general use as specified by the NEC 2011 Edition Section 310.16.

60°C – Relevant for TW and UF Aluminium wires

75°C – Relevant for RHW, THHW, THW, THWN, XHHW, XHWN & USE Aluminium wires

90°C – Relevant for TBS, SA, SIS, RHH, RHW-2,THHN, THHW, THW-2,THWN-2, USE-2, XHH, XHHW, XHHW-2, XHWN-2 and XHHN Aluminium wires

Notes:

Section 310.15(B) shall be referenced for ampacity correction factors where the ambient temperature is other than 30°C (86°F).

Section 310.15(C)(1) shall be referenced for more than three current-carrying conductors.

Section 310.16 shall be referenced for conditions of use.