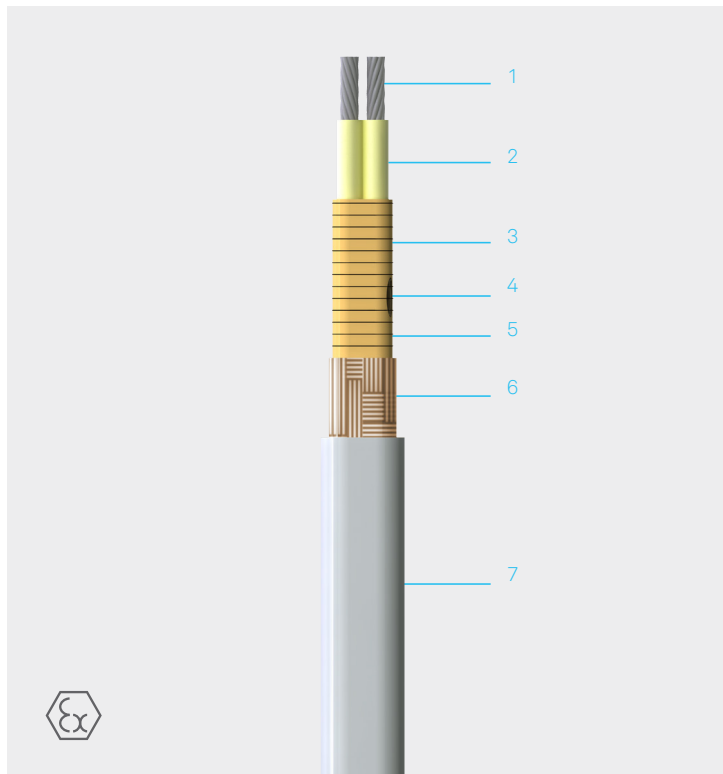


BPL-AL

Parallel Constant Wattage Cable



1	Conductors: stranded copper wire, 3.0 mm ² , nickel-plated
2	High temperature glass fibre and mica insulation
3	Heating element
4	Parallel circuit connection
5	High temperature glass fibre and mica insulation
6	High temperature glass fibre and mica insulation
7	Aluminium outer jacket

- High withstand temperature up to 932 °F (500 °C)
- It can be cut to length at site and can replace Mineral Insulated cables for applications where the cut to length feature is preferred
- Jacketed in a continuous aluminum extrusion for maximum mechanical strength
- BPL-AL is approved for use in non-hazardous and hazardous areas to world wide standards

BPL-AL is a parallel resistance trace heater that can be used for freeze protection or temperature maintenance in instrument tubing, pipework, and vessels requiring high power output or high exposure temperatures of up to 932°F (500°C).

It can be cut to length at site and can replace Mineral Insulated cables for applications where the cut to length feature is preferred. This feature considerably simplifies project engineering and installation. The trace heater is cut and terminated directly on the construction site according to the circumstances. Parallel resistance heaters formed by a coiled resistive heating element wrapped around two parallel buss wires. The distance between the contact points forms the heating zone length.

Explosion protection

Marking	Class I, Div 2, Groups A,B,C, D Class II, Div 2, Groups E, F, G Class III Ex 60079-30-1 IIC T* Gb Ex 60079-30-1 IIIC T# °C Db T*and T# see table maximum pipe/work piece temperature
Certification	CSA 70144884 IECEX CML 22.0058

Other approvals and certificates, see www.bartec.com

Technical data

Nominal voltage	AC 110 to 120 V, AC 208 to 277 V
Max. exposure temperature	continuous +662 °F (+350 °C), energized intermittent +932 °F (+500 °C), de-energized
Min. operating temperature	-40 °F (-40 °C)
Min. installation temperature	-40 °F (-40 °C)
Dimensions	0.42 x 0.30 in (10.7 mm x 7.7 mm)
Weight	11.0 lbs/100 ft (16.5 kg / 100 m)
Min. bending radius	1.97 in (50 mm)

Power Output

Type	Power output	
3 BPL-AL	3 W/ft	10 W/m
5 BPL-AL	5 W/ft	15 W/m
10 BPL-AL	10 W/ft	30 W/m
15 BPL-AL	15 W/ft	50 W/m
20 BPL-AL	20 W/ft	70 W/m
30 BPL-AL	30 W/ft	100 W/m
45 BPL-AL	45 W/ft	150 W/m

Maximum Pipe/Work piece Temperatures

	Area Classification Hazardous ¹						Safe ²
	T6	T5	T4	T3	T2	T1	
3 BPL-AL	93 °F 34 °C	122 °F 50 °C	212 °F 100 °C	370 °F 188 °C	554 °F 290 °C	644 °F 340 °C	644 °F 340 °C
5 BPL-AL	-	97 °F 36 °C	160 °F 71 °C	320 °F 160 °C	552 °F 289 °C	662 °F 350 °C	662 °F 350 °C
10 BPL-AL	-	52 °F 11 °C	82 °F 28 °C	212 °F 100 °C	575 °F 246 °C	613 °F 323 °C	613 °F 323 °C
15 BPL-AL	-	-	-	102 °F 39 °C	352 °F 178 °C	529 °F 276 °C	529 °F 276 °C
20 BPL-AL	-	-	-	-	212 °F 100 °C	365 °F 185 °C	365 °F 185 °C
30 BPL-AL	-	-	-	-	118 °F 48 °C	284 °F 140 °C	284 °F 140 °C
45 BPL-AL	-	-	-	-	-	97 °F 36 °C	97 °F 36 °C

The above data is for 230 V, for 277 V applications contact factory representative.

Notes:

¹Surface temperature limits in accordance with EN60079.

²Surface temperature limited by materials of construction (withstand temperature)

The maximum pipe and work piece temperature have to be ensured by design calculation (Stabilized design) or by temperature limiter (Controlled design)

Power Conversion Factors

Voltage	110 V	120 V	240 V	277 V
Power output	0.91	1.09	1.09	1.45

Zone length BPL2-A

3 BPL2-AL	39.4 in	1000 mm
5 BPL2-AL	39.4 in	1000 mm
10 BPL2-AL	39.4 in	1000 mm
15 BPL2-AL	39.4 in	1000 mm
20 BPL2-AL	39.4 in	1000 mm
30 BPL2-AL	39.4 in	1000 mm
45 BPL2-AL	39.4 in	1000 mm

Zone length BPL1-A

3 BPL1-AL	39.4 in	1000 mm
5 BPL1-AL	39.4 in	1000 mm
10 BPL1-AL	39.4 in	1000 mm
15 BPL1-AL	39.4 in	1000 mm
20 BPL1-AL	39.4 in	1000 mm
30 BPL1-AL	39.4 in	1000 mm
45 BPL1-AL	39.4 in	1000 mm

Max. heating circuit length 120 V

3 BPL1-AL	423 ft	129 m
5 BPL1-AL	288 ft	88 m
10 BPL1-AL	180 ft	55 m
15 BPL1-AL	121 ft	37 m
20 BPL1-AL	101 ft	31 m
30 BPL1-AL	82 ft	25 m
45 BPL1-AL	55 ft	17 m

Max. heating circuit length AC 240 V

3 BPL2-AL	787 ft	240 m
5 BPL2-AL	574 ft	175 m
10 BPL2-AL	377 ft	115 m
15 BPL2-AL	246 ft	75 m
20 BPL2-AL	177 ft	54 m
30 BPL2-AL	167 ft	51 m
45 BPL2-AL	111 ft	34 m

Max. heating circuit length AC 208 V

3 BPL2-AL	492 ft	150 m
5 BPL2-AL	394 ft	120 m
10 BPL2-AL	279 ft	85 m
15 BPL2-AL	213 ft	65 m
20 BPL2-AL	164 ft	50 m
30 BPL2-AL	151 ft	46 m
45 BPL2-AL	95 ft	29 m

Max. heating circuit length AC 277 V

3 BPL2-AL	804 ft	245 m
5 BPL2-AL	591 ft	180 m
10 BPL2-AL	384 ft	177 m
15 BPL2-AL	289 ft	88 m
20 BPL2-AL	246 ft	75 m
30 BPL2-AL	203 ft	62 m
45 BPL2-AL	164 ft	50 m

Ordering information

BPL-AL parallel resistance heating cable	Type	Order no.
AC 240 V (AC 208 V and 277 V)	3 BPL2-AL	on request
	5 BPL2-AL	27-5875-20157000
	10 BPL2-AL	27-5875-20307000
	15 BPL2-AL	27-5875-20507000
	20 BPL2-AL	27-5875-20707000
	30 BPL2-AL	27-5875-21007000
	45 BPL2-AL	on request
AC 120 V (AC 110 V)	3 BPL1-AL	on request
	5 BPL1-AL	27-5875-10157000
	10 BPL1-AL	27-5875-10307000
	15 BPL1-AL	27-5875-10507000
	20 BPL1-AL	27-5875-10707000
	30 BPL1-AL	27-5875-11007000
	45 BPL1-AL	on request