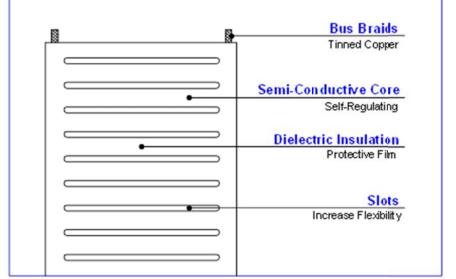


EP-23-80W-24V Self-Regulating Heating Element

Construction...



The EP-23-80W-24V STEP® Heating Element is a patented lowvoltage, strong, thin and flat heater. The heating element is constructed of two parallel bus braids embedded in a semi-conductive polymeric material.

A polymeric dielectric film is applied at the time of manufacture so that the film is thermally fused to the heating material. This creates an element that features a solid and homogeneous construction that will not separate from thermal cycling or physical flexing.

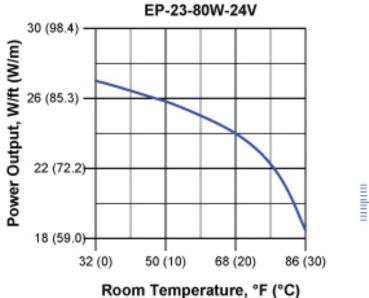
Applications...

Radiant heat systems	See General Data Sheet	

Product Specifications...

Heating element type	Positive Temperature Coefficient (PTC) semi-conductive polymer	
Dimensions	Width: 9" (230 mm)	
	Thickness: 3/64" (1,2 mm)	
	Length: cut to order with a 174 ft (53 m) maximum shipping spool length	
	Weight: 0.18 lb/ft (0,27 kg/m)	
Output wattage	24 W/ft (78.8 W/m) @ 68°F (20°C) – see power output curve	
Supply voltage	24V AC or DC	
Bus braid	15 AWG tinned copper flat braid	
Dielectric insulation	Protective film thermally bonded to heating element	
Minimum bending radius	3/32" (2.5mm) @ 32°F (0°C)	
Maximum exposure temperature	176°F (80°C)	
Chemical Compatibility	Do not use in conjunction with aggressive construction glues and	
	adhesives or with asphalt or butyl sealants / membranes	

Power Output Curve...



Electrical Data...

Amperage draw @ 68°F (20°C) when powered at 24V	1.0 A/ft (3,28A/m)
Nominal resistance @ 68°F (20°C)	24 Ω/ft (7 Ω/m)
Element length:	
Maximum element length per circuit in the power supply (450W)	18.7 ft (5,7 m)
Power Source:	
SELV (safety extra low voltage) power supply EPI-LX-R-250W / -500W / -1000W / -1500W	
PV solar panels	
Connection:	
Recommended tinned copper connectors and sealant tape	
Crimped to tinned copper lead wires using recommended tool	

Approvals / Certifications...



Conforms to UL 1693 – Third Edition Conforms to UL 5085-1 & 2 and CSA-C22.2 No. 66.1 & 2-06

Conforms to EN 60335.2-96-2009 Conforms to EN 61558-2-2:2007



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