



TAD & ASSOCIATES, INC.

heat tracing specialists



FEP-LV

LOW VOLT CONSTANT WATTAGE

Heat Trace



1. 16 AWG Buss Wires
2. 10 mils Insulation
3. 10 mils Insulation
4. Resistance Wire
5. 22 mils Insulation
6. Ground Braid
7. Optional 15 mil Overjacket



Description

FEP-LV low volt constant wattage heater cables are parallel-resistance electric heaters that provide constant power output along the entire length of cable using 12V or 24V power. FEP-LV low volt cables are the only choice for mobile operations or where regular line voltages are unavailable in rural settings such as shale plays. FEP-LV is constructed of 16 AWG bright copper buss wires which offer exceptional flexibility and small surface area for confined spaces while supporting maintenance temperatures up to 150°F. The fluoropolymer dielectric can withstand exposure temperatures up to 400°F while de-energized and is perfectly safe in wet areas and provides excellent protection from impact, abrasion and UV. The ground braid facilitates grounding & provides mechanical protection. An optional overjacket further protects the braid in heavily corrosive environments against organic/inorganic compounds. And like all constant wattage type heating cables, FEP-LV cables are immune to inrush current & last up to 4X as long as self-regulating cables offering a much greater return-on-investment. FEP-LV low volt heater cables can be cut to length in the field using standard electrical tools and are approved for use in ordinary & Class 1 Division 2 hazardous locations.

Applications

FEP-LV low volt heater cables are ideally suited for freeze protection and some mild process temperature applications. Common applications are pipelines, natural gas & oil well-sites, automation & control instrumentation, skid units, de-icing of remote radio/telecomm & meteorological instrumentation, mobile fluid transport & much more!

Approvals

- CSA:**
 Ordinary locations 2(B, E) 3C
 Hazardous locations
 Class 1 Div. 2 (Groups A, B, C, D)
 Class 2 Div. 2 (Groups E, F, G)
 Class 3 Div. 2
- UL Standard 515
 UL Standard 1673

Note: For heater cable applications refer to National Electric Code Article 427 Fixed electric heating for pipelines and vessels.

TAD & Associates, Inc.
P.O. Box 2170
Canyon Lake, Texas 78133

Phone: 830.964.4435
Fax: 830.964.4441
<http://www.tad-associates.com>

Ordering Information

Example Configuration		FEP-LV 5-1 TC		
FEP-LV	Watts/Foot	Voltage	Braid/Jacket	Weight/1,000'
	3,5,7	1=12V	TC=Tinned Copper	40 Lbs.
		2=24V	NP=Nickel Plated Copper	42 Lbs.
T Rating	T-3		TCOJ=Fluoropolymer Jacket	50 Lbs.

Note: AC or DC voltages are permissible depending on power source. Custom outputs available upon review/approval. 500 Ft. minimum order.

Output at Alternate Voltages

Typical Heaters	12VDC	24VDC
FEP-LV 3-1	3.0	12.0
FEP-LV 3-2	0.75	3.0
FEP-LV 5-1	5.0	—
FEP-LV 5-2	1.25	5.0
FEP-LV 7-1	2.1	—
FEP-LV 7-2	1.75	7.0

Note: Dashed lined indicates cable failure imminent or no appreciable output.

Accessories

PL-1M	Power Connection Kit
EC-M	End Termination Kit
ESK-14	Inline Splice Kit
TSK-14	Tee Splice Kit
AL-1	Aluminum Tape
FG-1	Fiberglass Tape

Note: Not all accessories are listed. See catalog for additional listings.

Maximum Circuit Length

Sample Heaters	0 Ft.	5 Ft.	10 Ft.	15 Ft.	20 Ft.	25 Ft.	30 Ft.	35 Ft.	40 Ft.
FEP-LV 3-1	3.0	2.95	2.84	2.66	2.45	2.21	1.96	—	—
FEP-LV 3-2	3.0	2.99	2.96	2.91	2.84	2.78	2.67	2.57	2.46
FEP-LV 5-1	5.0	4.98	4.65	4.19	3.65	—	—	—	—
FEP-LV 5-2	5.0	4.96	4.87	4.75	4.60	4.37	4.16	3.89	3.60
FEP-LV 7-1	7.0	6.76	6.16	5.36	4.48	—	—	—	—
FEP-LV 7-2	7.0	6.94	6.78	6.53	6.20	5.11	5.4	4.96	4.52

Note: Dashed line indicates drop off exceeds output minimums or amperage exceeds conductor limitations.