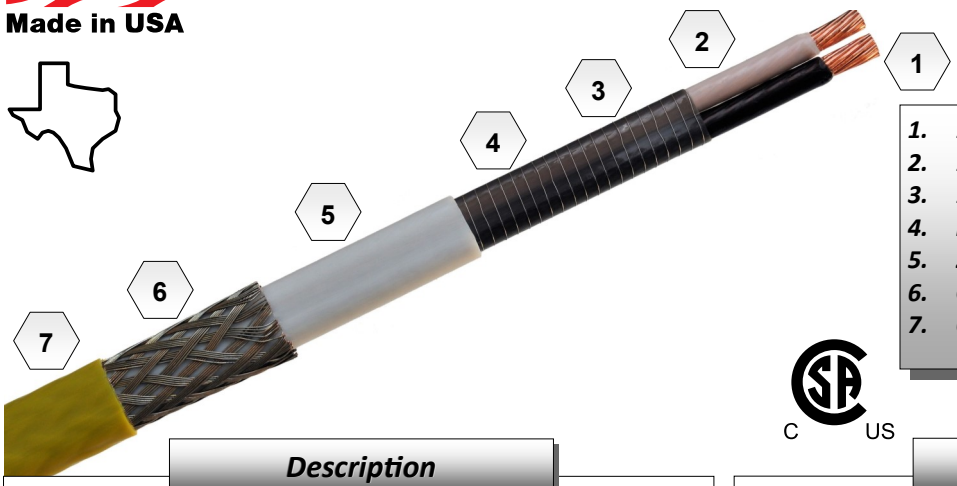
TAD & ASSOCIATES, INC. heat tracing specialists

FEP

CONSTANT WATTAGE HEATER CABLE

Made in USA



1. 12 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

Heat Trace

Description

FEP constant wattage heater cables are parallel-resistance electric heaters that provide constant power output along the entire length of cable. FEP constant wattage heater cables are constructed of 12 AWG bright copper buss wires which allow for long circuit lengths and support maintenance temperatures up to 200°F. The fluoropolymer dielectric protects the cable from exposure temperatures up to 400°F when de-energized. This is suitable for process pipes that are periodically steam purged (150PSIG).

FEP heater cables are perfectly safe in wet areas and provide excellent protection from impact and abrasion. The ground braid provides essential grounding protection and the optional fluoropolymer overjacket protects the braid in heavily corrosive environments from organic and inorganic compounds. FEP heater cables can be custom tailored to meet specific customer needs including, flexible power outputs up to 15 W/Ft., flexible service voltages up to 500V and broad choice in colors for identification or aesthetic purposes.

Unlike self-regulating heater cables, FEP cables are not limited to predetermined voltages and do not exhibit inrush. FEP cables typically last up to 4X as long as self-regulating heater cables and come with a standard 10 year warranty. FEP heater cables can be cut to length in the field using standard electrical tools and should not be overlapped.

Applications

FEP constant wattage heater cables are ideally suited for all freeze protection and low to mid temperature process maintenance applications where the flow of fluid is essential. In areas requiring electric tracing such as: pipelines carrying chemicals, lubricants, food process, potable water, fire prevention systems and de-icing of roofs and downspouts. FEP cables are also an ideal solution for frost heave prevention systems and cryogenic systems such as LNG and ammonia storage. FEP heater cables will provide the exact amount of protection necessary for your application requirements.

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.

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Ordering Information

Example Configuration		FEP 9-277 TC		
FEP	Wattage	Voltage	Braid/Jacket	Weight/1,000'
	1-15	1=120V	TC=Tinned Copper	80 Lbs.
		2=240V	NP=Nickel Plated Copper	79 Lbs.
T Rating	T-3	4=480V	SS=Stainless Steel	80 Lbs.
			TCOJ=Fluoropolymer Jacket	90 Lbs.

Note: For other voltages not listed above (i.e. 208, 220, 277) please specify full voltage when ordering. Maximum permissible watt density, 15 W/Ft.

Output at Alternate Voltages

Typical Heaters	110 VAC	120 VAC	208 VAC	240 VAC	277 VAC
FEP 4-1	3.3	4.0	12.0	16.0	—
FEP 6-1	5.0	6.0	18.0	—	—
FEP 9-1	7.5	9.0	—	—	—
FEP 10-2	2.1	2.5	7.5	10.0	13.3
FEP 15-2	3.1	3.8	11.3	15.0	20.0

Note: Dashed lined indicates cable failure imminent.

*To minimize the danger of fire from sustained electrical arcing if the heating cable is damaged or improperly installed, and to comply with **National Electric Code (NEC) Article 427.22** requirements, agency certifications, and local codes, ground-fault equipment protection must be used on each heating cable branch circuit. Arcing may not be stopped by conventional circuit protection. Ground fault protection is the responsibility of the end user and should be installed by a certified electrician.*

Accessories

PL-1	Power Connection Kit
EC-1CW	End Termination Kit
ESK-12	Inline Splice Kit
TSK-12	Tee Splice Kit
AL-1	Aluminum Tape
FG-1	Fiberglass Tape
TD-1	Snap Action Thermostat
TF115	Ambient Sensing Thermostat
TRF115	Line Sensing Thermostat

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

Maximum Circuit Length

Sample Heaters	0 Ft.	50 Ft.	100 Ft.	150 Ft.	200 Ft.	250 Ft.	300 Ft.	400 Ft.	500 Ft.
FEP 3-1	3.0	2.99	2.98	2.94	2.90	2.85	2.79	2.64	2.46
FEP 5-1	5.0	4.98	4.93	4.84	4.73	4.59	4.42	4.04	3.62
FEP 3-2	3.0	3.0	3.0	2.99	2.98	2.96	2.95	2.90	2.85
FEP 8-2	8.0	7.99	7.96	7.90	7.83	7.73	7.63	7.35	7.03
FEP 15-2	15.0	14.96	14.84	14.65	14.39	14.08	13.68	—	—
FEP 4-277	4.0	3.99	3.99	3.98	3.96	3.95	3.92	3.87	3.80
FEP 8-277	8.0	7.98	7.96	7.92	7.86	7.79	7.71	7.50	7.25

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