

Precise Engineered Polymer Tubing Encapsulated Cable PEP™ TEC

Ruggedized Cable Designs Tailored
for Oil and Gas Applications



475°C Continuous
Operation



Customizable Cable
Designs Annealed
Tubing Encapsulations

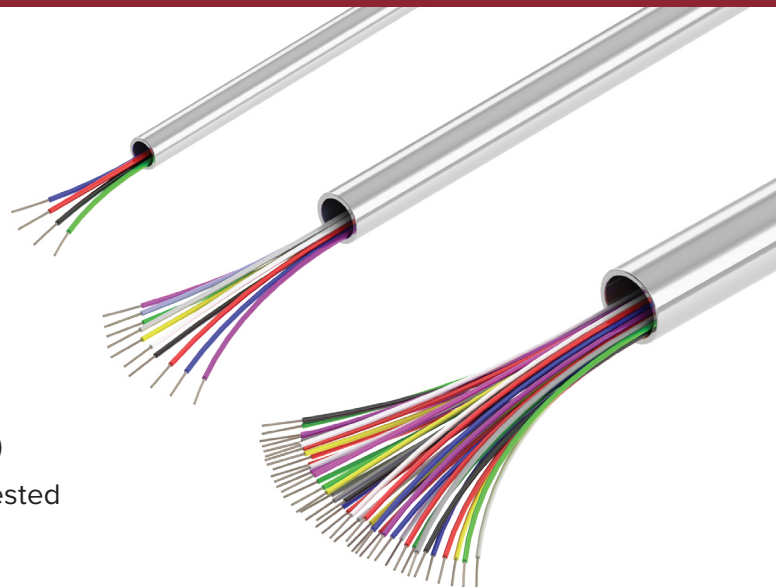


Superior Reliability and
Chemical Resistance



Proven, Cost-Effective
Technology

- TEC (Tube Encased Cable) is designed & custom manufactured specifically for the Oil & Gas market
- Field proven technology and proprietary manufacturing process
- Various conductor sizes & configurations
- Solid / Stranded core conductors
- Annealed, corrosion resistant tubing alloys, tailored for each application
- Various polymer Insulations (PVC, ETFE, FEP & more)
- All PEP™ TEC's can be internally sealed & pressure tested
- Stringent manufacturing & quality control processes



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PRECISE ENGINEERED TUBING ENCAPSULATED CABLE SPECIFICATIONS

Material Properties	
Tubing Type	316 S.S., 316L S.S., 2205 Duplex Alloy, Inconel 625 & 825
Wall Thickness, in	0.028", 0.035", 0.049", 0.065" and more
Mechanical Properties	
Collapse Pressure	See Chart Below
Tensile Strength	See Chart Below
Yield Strength	See Chart Below
Electrical Properties	
Conductor Type	Solid or Stranded Core or Mixed
Conductor Wire Gauges	1 to 40 AWG
Conductor Insulations	PVC, ETFE, FEP, PFA, PTFE, Polyimide, Fiberglass & More

PEP™ TEC – TYPICAL TEMPERATURE RATINGS

Insulation	0-100 °C	100-150 °C	150-200°C	200- 250°C	250-300°C	300-475°C
PVC	✓					
ETFE	✓	✓				
FEP	✓	✓	✓			
PEP™ HT	✓	✓	✓	✓	✓	
PEP™ XHT	✓	✓	✓	✓	✓	✓

Note 1: Higher Temperature Insulations are available upon request.

TUBING		316 SS MECHANICAL PROPERTIES				DUPLEX 2205 MECHANICAL PROPERTIES			
OD (in)	WT (in)	BP (psi)	YS (lbs)	UYS (lbs)	CP (psi)	BP (psi)	YS (lbs)	UYS (lbs)	CP (psi)
3/16	0.028	10,453	561	1,188	10,163	18,293	982	1,328	17,785
1/4	0.035	9,800	946	2,010	9,632	17,150	1,655	2,245	16,856
1/4	0.049	13,720	1,238	2,630	12,607	24,010	2,166	2,939	22,062
3/8	0.049	9,147	2,007	4,265	9,087	16,007	3,513	4,767	15,903
1/2	0.049	6,860	2,777	5,901	7,072	12,005	4,860	6,595	12,375
5/8	0.065	7,280	4,574	9,720	7,455	12,740	8,005	10,864	13,046
5/8	0.083	9,296	5,653	12,012	9,213	16,268	9,893	13,426	16,123

CP= Collapse Pressure BP = Burst Pressure YS = Yield Strength WT = Wall Thickness UYS = Ultimate Yield Strength

Note 2: Tubing sizes listed above are for reference only, additional tubing sizes and alloys available.

Note 3: All tubing meets ASTM requirements.

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