

# T-RAD™-400

## 50 Ohm Leaky Feeder Coaxial Cable

- Provides RF coverage in buildings, mines and other enclosed areas
- Offers broadband performance up to 2.5 GHz
- Flexible, non-kinking design provides easier installation
- Accepts standard "EZ" crimp connectors used for LMR-400 cable\*
- FR series is MSHA approved for mining applications

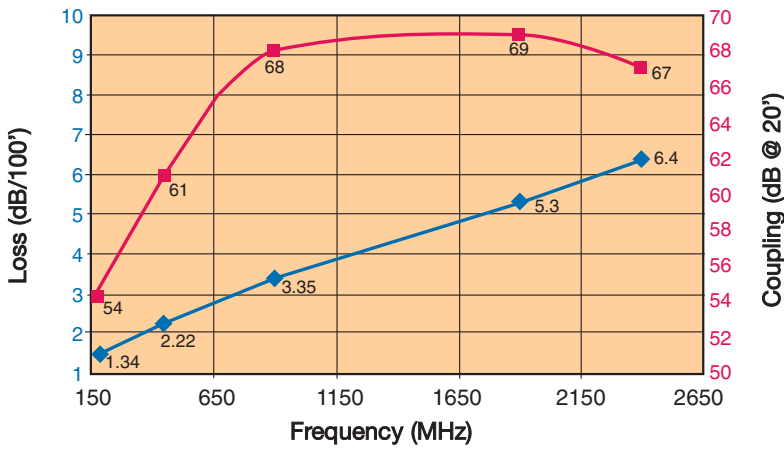


Part Description				
Part Number	Application	Jacket	Color	Stock Code
AA-9300	T-RAD-400-PVC	PVC	Black	44043
AA-11399	T-RAD-400-FR	FRPE	Black	44053

Physical & Mechanical Specifications		
	in	(mm)
Inner Conductor: Solid BCCAI	0.108	(2.74)
Dielectric: Gas-Injected Foam Polyethylene	0.285	(7.24)
Inner Shield: Bonded Aluminum Tape	0.291	(7.39)
Jacket: Extruded PVC or FR	0.350	(8.89)
Bend Radius: Installation	1.0	(38)
Bend Radius: Repeated	4.0	(152.4)
Weight: Extruded PVC or FR	0.05 lbs./ft	(0.076 kg/m)
Operating Temperature Range	-40°/+185°F	-40°/+85°C

Electrical Specifications				
Velocity of Propagation		85%		
Dielectric Constant		1.38		
Time Delay		1.20 nS/ft (3.94 nS/m)		
Impedance		50 ohms		
Voltage Withstand		2500 Volts DC		
Jacket Spark		5000 Volts RMS		
Attenuation	(MHz)	dB/100 ft	dB/100 m	Coupling Loss*
	150	2.30	7.55	54
	450	4.00	13.2	65
	900	5.90	19.40	68
	1900	8.80	28.9	68
	2400	10.00	33.5	67

## T-RAD™-400 Loss & Coupling vs Frequency



## T-RAD™-400 Comparison

T-RAD-400 -vs- Corrugated Copper			
	1/4" CC	T-RAD-400	3/8" CC
Overall Diameter (in)	0.350"	0.350"	0.460"
Insertion Loss/Coupling Loss			
150 MHz	2.70/58	2.30/54	1.5/56
450 MHz	5.1/62	4.00/65	2.6/61
900 MHz	7.1/69	5.90/68	3.7/68
1700 MHz	9.7/71	8.50/68	5.3/74
2400 MHz	13.5/70	10.0/67	7.0/73



*Special crimp ring part number  
3192-164 (TR-400) must be  
used on all EZ style connectors*

## Connectors

Interface	Description	Part Number	Stock Code	VSWR* Freq. (GHZ)	Coupling Nut	Inner Contact Attachment	Outer Contact Attachment	Finish* Body/Pin	Length in (mm)	Width in (mm)	Weight lb (g)
7-16 DIN Male	Straight Plug	EZ-400-716M-X	3190-2524	<1.25:1 (6)	Hex	Spring Finger	Crimp	A/G	1.6 (39.5)	1.38 (35)	0.277 (126.0)
UHF Male	Straight Plug	EZ-400-UM	3190-997	<1.25:1 (2.5)	Knurl	Spring Finger	Crimp	N/G	1.8 (48)	0.80 (20.3)	0.076 (34.4)
N Female	Straight Jack	EZ-400-NF-X	3190-2818	<1.25:1 (2.5)	NA	Spring Finger	Crimp	N/G	1.8 (45)	0.66 (16.8)	0.105 (47.6)
N Female	Bulkhead Jack	EZ-400-NF-BH	3190-518	<1.25:1 (2.5)	NA	Spring Finger	Crimp	N/G	1.8 (46)	0.88 (22.4)	0.102 (46.3)
N Male	Straight Plug	EZ-400-NMH-X	3190-2590	<1.25:1 (10)	Hex/Knurl	Spring Finger	Crimp	A/G	1.5 (38)	0.89 (22.6)	0.103 (46.8)
N Male	Right Angle	EZ-400-NMH-RA-X	3190-2638	<1.35:1 (6)	Hex/Knurl	Spring Finger	Crimp	A/G	1.87 (47)	1.42 (36.0)	0.177 (80.2)
TNC Male	Reverse Polarity	EZ-400-TF-RP	3190-795	<1.25:1 (2.5)	NA	Spring Finger	Crimp	A/G	1.8 (46)	0.55 (14.0)	0.074 (33.6)
TNC Male	Straight Plug	EZ-400-TM-X	3190-2533	<1.25:1 (6)	Hex/Knurl	Spring Finger	Crimp	A/G	1.9 (48)	0.67 (17.5)	0.075 (34.3)
TNC Male	Reverse Polarity	EZ-400-TM-RP	3190-794	<1.25:1 (2.5)	Knurl	Spring Finger	Crimp	A/G	1.7 (43)	0.59 (15.0)	0.074 (33.6)