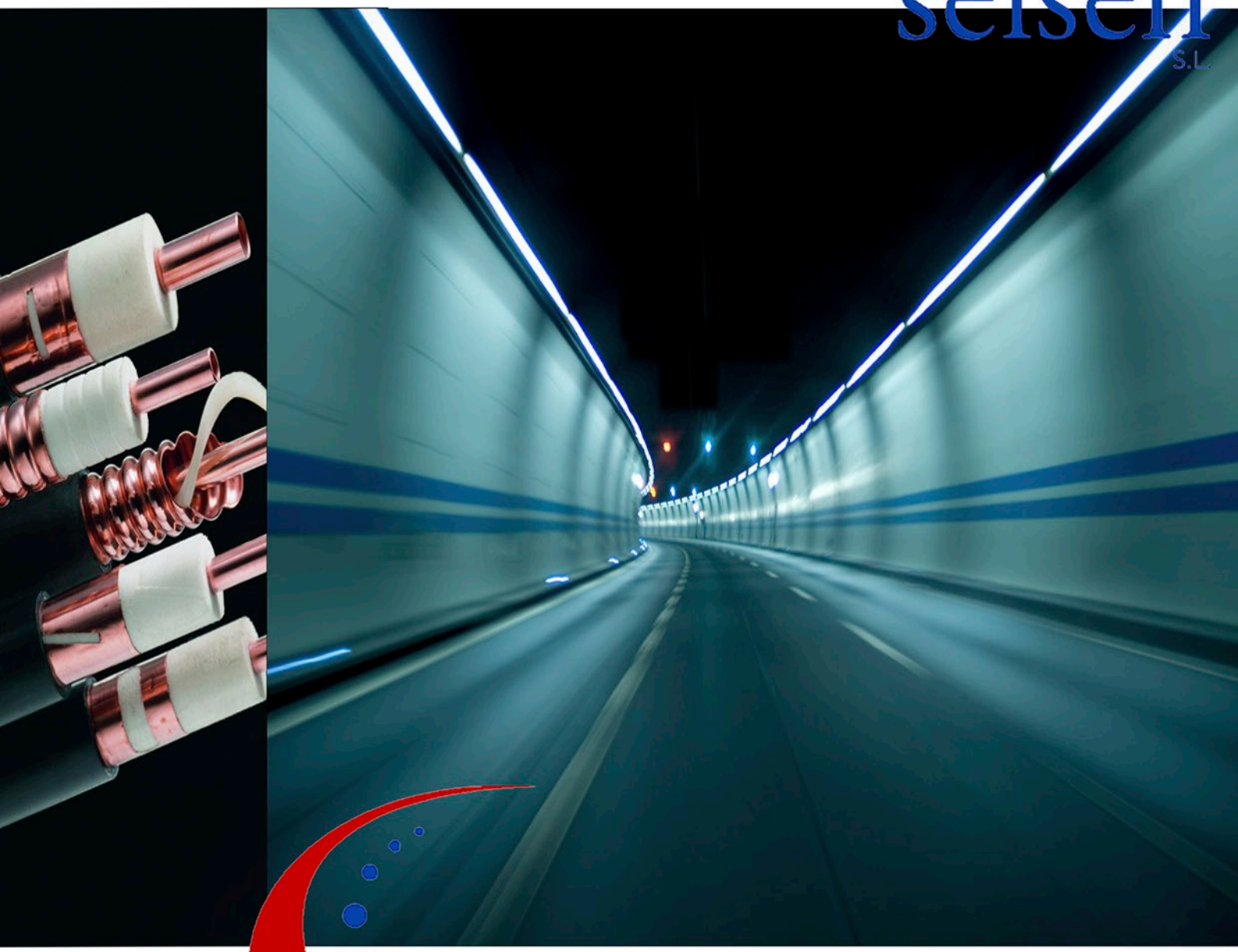
seisen S.L.



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LEAKY FEEDER
Radio Frequency

LEAKY RF - 3/8” - 1/2” - 50

LEAKY RF CABLE

HLCAY(Z)-50-8
(3/8”)

HLCAY(Z)-50-12
(1/2”)

HLCAY(Z)(R)-50-12
(1/2”)

GENERAL SPECIFICATIONS			
Nominal Size	3/8”	1/2”	1/2”
Cable Type	Coupling Type	Coupling Type	Radiating Type

CONSTRUCTION MATERIALS			
Inner Conductor	Copper-Clad Aluminum Wire	Copper-Clad Aluminum Wire	Copper-Clad Aluminum Wire
Dielectric	Physical Foam Polyethylene	Physical Foam Polyethylene	Physical Foam Polyethylene
Outer Conductor	Corrugated Copper Tube and Slot	Corrugated Copper Tube and Slot	Overlapping Copper Foil
Jacket	Black PE or Low Smoke Halogen-free Fire-retardant	Black PE or Low Smoke Halogen-free Fire-retardant	Black PE or Low Smoke Halogen-free Fire-retardant

PHYSICAL DIMENSIONS			
Inner Conductor Diameter	3.10 mm	4.80 mm	4.80 mm
Dielectric Diameter	8.35 mm	12.30 mm	12.30 mm
Outer Conductor Diameter	9.50 mm	13.80 mm	12.60 mm
Diameter Over Jacket	11.20 mm	15.70 mm	15.50 mm

MECHANICAL AND ENVIRONMENTAL SPECIFICATIONS			
Minimum Bending Radius	40 mm	50 mm	125 mm
Repeated Bending Radius	250 mm	350 mm	350 mm
Minimum Distance to Wall	50 mm	50 mm	50 mm
Tensile Strength	450 N	1000 N	1000 N
Storage Temperature	-55 °C ~ +85 °C	-55 °C ~ +85 °C	-55 °C ~ +85 °C
Installation Temperature	-40 °C ~ +60 °C	-40 °C ~ +60 °C	-40 °C ~ +60 °C
Operation Temperature	-55 °C ~ +85 °C	-55 °C ~ +85 °C	-55 °C ~ +85 °C

LEAKY RF - 3/8" - 1/2" - 50

	HLCAY(Z)-50-8 (3/8")	HLCAY(Z)-50-12 (1/2")	HLCAY(Z)(R)-50-12 (1/2")
ELECTRICAL SPECIFICATIONS			
Capacitance	76 pF/m	76 pF/m	75 pF/m
Impedance	50 ± 2 Ω	50 ± 1 Ω	50 ± 2 Ω
Velocity	88%	88%	88%
Insulation Resistance	>5000 MΩ•km	>5000 MΩ•km	>5000 MΩ•km
Jacket Spark	5 kV	8 kV	8 kV
Insulation Voltage	2.5 kV	6.0 kV	6.0 kV
Inner Conductor DC Resistance	3.10 Ω/km	1.48 Ω/km	1.48 Ω/km
Outer Conductor DC Resistance	3.10 Ω/km	2.10 Ω/km	3.40 Ω/km
Stop Bands	–	–	At approximately 650 MHz and its multiples
VSWR			
0.3 ~ 0.5 GHz	≤1.15	≤1.15	≤1.20
0.8 ~ 1.0 GHz	≤1.15	≤1.15	≤1.20
1.7 ~ 2.0 GHz	≤1.20	≤1.20	–
2.0 ~ 2.4 GHz	–	≤1.20	–

PERFORMANCE

ATTENUATION 20°C (dB/100m)			
75 MHz	3.30	2.00	–
150 MHz	4.50	2.90	3.30
450 MHz	7.50	5.30	5.90
800 MHz	10.50	7.30	8.40
900 MHz	11.00	7.90	9.10
1800 MHz	15.80	12.00	–
2200 MHz	–	13.50	–
2400 MHz	–	14.10	–

COUPLING LOSS (2m) (50%/95%)			
75 MHz	58 dB / 69 dB	67 dB / 77 dB	–
150 MHz	60 dB / 70 dB	69 dB / 78 dB	62 dB / 70 dB
450 MHz	61 dB / 72 dB	68 dB / 78 dB	65 dB / 70 dB
800 MHz	65 dB / 75 dB	70 dB / 80 dB	64 dB / 70 dB
900 MHz	68 dB / 78 dB	70 dB / 80 dB	63 dB / 70 dB
1800 MHz	74 dB / 85 dB	77 dB / 86 dB	–
2200 MHz	–	78 dB / 87 dB	–
2400 MHz	–	78 dB / 87 dB	–

LEAKY RF - 7/8" - 50

LEAKY RF CABLE

HLCTY(Z)-50-22 (7/8")

HLCTY(Z)(R)-50-22 (7/8")

HLCTY(Z)(R)-50-22 (7/8")

HLCTY(Z)(R)-50-22 (7/8")

GENERAL SPECIFICATIONS				
Nominal Size	7/8"	7/8"	7/8"	7/8"
Cable Type	Coupling Type	Radiating A Type	Radiating C Type	Radiating D Type

CONSTRUCTION MATERIALS				
Inner Conductor	Smooth Copper Tube	Smooth Copper Tube	Smooth Copper Tube	Smooth Copper Tube
Dielectric	Physical Foam Polyethylene	Physical Foam Polyethylene	Physical Foam Polyethylene	Physical Foam Polyethylene
Outer Conductor	Corrugated Copper Tube and Slot	Overlapping Copper Foil	Overlapping Copper Foil	Overlapping Copper Foil
Jacket	Black PE or Low Smoke Halogen-free Fire-retardant	Black PE or Low Smoke Halogen-free Fire-retardant	Black PE or Low Smoke Halogen-free Fire-retardant	Black PE or Low Smoke Halogen-free Fire-retardant

PHYSICAL DIMENSIONS				
Inner Conductor Diameter	9.00 mm	9.00 mm	9.00 mm	9.00 mm
Dielectric Diameter	22.30 mm	22.50 mm	22.50 mm	22.50 mm
Outer Conductor Diameter	24.90 mm	22.80 mm	22.80 mm	22.80 mm
Diameter Over Jacket	27.50 mm	27.20 mm	27.20 mm	27.20 mm

MECHANICAL AND ENVIRONMENTAL SPECIFICATIONS				
Minimum Bending Radius	90 mm	250 mm	250 mm	250 mm
Repeated Bending Radius	500 mm	500 mm	500 mm	500 mm
Minimum Distance to Wall	50 mm	50 mm	50 mm	50 mm
Tensile Strength	1470 N	1470 N	1470 N	1470 N
Storage Temperature	-55 °C ~ +85 °C	-55 °C ~ +85 °C	-55 °C ~ +85 °C	-55 °C ~ +85 °C
Installation Temperature	-40 °C ~ +60 °C	-40 °C ~ +60 °C	-40 °C ~ +60 °C	-40 °C ~ +60 °C
Operation Temperature	-55 °C ~ +85 °C	-55 °C ~ +85 °C	-55 °C ~ +85 °C	-55 °C ~ +85 °C

LEAKY RF - 7/8" - 50

	HLCTY(Z)-50-22 (7/8")	HLCTY(Z)(R)-50-22 (7/8")	HLCTY(Z)(R)-50-22 (7/8")	HLCTY(Z)(R)-50-22 (7/8")
ELECTRICAL SPECIFICATIONS				
Capacitance	76 pF/m	75 pF/m	75 pF/m	75 pF/m
Impedance	50 ± 1 Ω	50 ± 2 Ω	50 ± 2 Ω	50 ± 2 Ω
Velocity	88%	89%	89%	89%
Insulation Resistance	>5000 MΩ•km	>5000 MΩ•km	>5000 MΩ•km	>5000 MΩ•km
Jacket Spark	8 kV	8 kV	8 kV	8 kV
Insulation Voltage	10 kV	10 kV	10 kV	10 kV
Inner Conductor DC Resistance	1.40 Ω/km	1.40 Ω/km	1.40 Ω/km	1.40 Ω/km
Outer Conductor DC Resistance	1.40 Ω/km	2.80 Ω/km	2.80 Ω/km	2.80 Ω/km
Stop Bands	–	At approximately 650 MHz and its multiples	At approximately 1033 MHz and its multiples	At approximately 650 MHz and its multiples
VSWR				
0.3 ~ 0.5 GHz	≤1.15	≤1.20	–	≤1.20
0.8 ~ 1.0 GHz	≤1.15	≤1.20	≤1.20	≤1.20
1.7 ~ 2.0 GHz	≤1.20	–	≤1.20	–
2.0 ~ 2.6 GHz	≤1.20	–	≤1.25	–

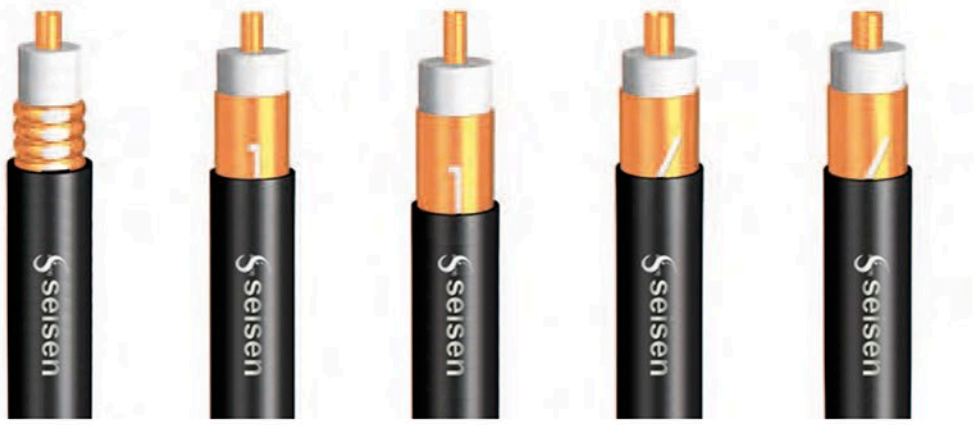
PERFORMANCE

ATTENUATION 20°C (dB/100m)				
75 MHz	1.20	1.20	–	–
150 MHz	1.70	1.80	–	1.70
450 MHz	3.10	3.30	–	3.10
800 MHz	4.30	5.10	4.10	4.60
900 MHz	4.60	5.50	4.30	5.30
1800 MHz	6.90	–	6.90	–
2200 MHz	7.80	–	9.60	–
2400 MHz	8.60	–	9.80	–

COUPLING LOSS (2m) (50%/95%)				
75 MHz	62 dB / 72 dB	60 dB / 68 dB	–	–
150 MHz	65 dB / 75 dB	70 dB / 78 dB	–	69 dB / 79 dB
450 MHz	71 dB / 81dB	69 dB / 80 dB	–	70 dB / 76 dB
800 MHz	75 dB / 85 dB	67 dB / 72 dB	70 dB / 73 dB	66 dB / 72 dB
900 MHz	77 dB / 87 dB	64 dB / 71 dB	69 dB / 72 dB	65 dB / 70 dB
1800 MHz	80 dB / 89 dB	–	68 dB / 71 dB	–
2200 MHz	80 dB / 88 dB	–	66 dB / 69 dB	–
2400 MHz	80 dB / 89 dB	–	63 dB / 67 dB	–

LEAKY RF - 1-1/4" - 50

LEAKY RF CABLE



	HLCTY(Z)-50-32 (1-1/4")	HLCTY(Z)(R)-50-32 (1-1/4")	HLCTY(Z)(R)-50-32 (1-1/4")	HLCTY(Z)(R)-50-32 (1-1/4")	HLCTY(Z)(R)-50-32 (1-1/4")
GENERAL SPECIFICATIONS					
Nominal Size	1-1/4"	1-1/4"	1-1/4"	1-1/4"	1-1/4"
Cable Type	Coupling Type	Radiating A Type	Radiating B Type	Radiating C Type	Radiating D Type
CONSTRUCTION MATERIALS					
Inner Conductor	Smooth Copper Tube	Smooth Copper Tube	Smooth Copper Tube	Smooth Copper Tube	Smooth Copper Tube
Dielectric	Physical Foam Polyethylene	Physical Foam Polyethylene	Physical Foam Polyethylene	Physical Foam Polyethylene	Physical Foam Polyethylene
Outer Conductor	Corrugated Copper Tube and Slot	Overlapping Copper Foil	Overlapping Copper Foil	Overlapping Copper Foil	Overlapping Copper Foil
Jacket	Black PE or Low Smoke Halogen-free Fire-retardant	Black PE or Low Smoke Halogen-free Fire-retardant	Black PE or Low Smoke Halogen-free Fire-retardant	Black PE or Low Smoke Halogen-free Fire-retardant	Black PE or Low Smoke Halogen-free Fire-retardant
PHYSICAL DIMENSIONS					
Inner Conductor Diameter	13.00 mm	13.00 mm	13.00 mm	13.00 mm	13.00 mm
Dielectric Diameter	32.50 mm	32.80 mm	32.80 mm	32.80 mm	32.80 mm
Outer Conductor Diameter	35.80 mm	33.60 mm	33.60 mm	33.60 mm	33.60 mm
Diameter Over Jacket	38.60 mm	38.20 mm	38.20 mm	38.20 mm	38.20 mm
MECHANICAL AND ENVIRONMENTAL SPECIFICATIONS					
Minimum Bending Radius	150 mm	400 mm	400 mm	400 mm	400 mm
Repeated Bending Radius	700 mm	800 mm	800 mm	800 mm	800 mm
Minimum Distance to wall	50 mm	50 mm	50 mm	50 mm	50 mm
Tensile Strength	2900 N	2900 N	2900 N	2900 N	2900 N
Storage Temperature	-55 °C ~ +85 °C	-55 °C ~ +85 °C	-55 °C ~ +85 °C	-55 °C ~ +85 °C	-55 °C ~ +85 °C
Installation Temperature	-40 °C ~ +60 °C	-40 °C ~ +60 °C	-40 °C ~ +60 °C	-40 °C ~ +60 °C	-40 °C ~ +60 °C
Operation Temperature	-55 °C ~ +85 °C	-55 °C ~ +85 °C	-55 °C ~ +85 °C	-55 °C ~ +85 °C	-55 °C ~ +85 °C

LEAKY RF - 1-1/4" - 50

	HLCTY(Z)-50-32 (1-1/4")	HLCTY(Z)(R)-50-32 (1-1/4")	HLCTY(Z)(R)-50-32 (1-1/4")	HLCTY(Z)(R)-50-32 (1-1/4")	HLCTY(Z)(R)-50-32 (1-1/4")
ELECTRICAL SPECIFICATIONS					
Capacitance	76 pF/m	75 pF/m	75 pF/m	75 pF/m	75 pF/m
Impedance	50 ± 1 Ω	50 ± 2 Ω	50 ± 2 Ω	50 ± 2 Ω	50 ± 2 Ω
Velocity	89%	89%	89%	89%	89%
Insulation Resistance	>5000 MΩ•km	>5000 MΩ•km	>5000 MΩ•km	>5000 MΩ•km	>5000 MΩ•km
Jacket Spark	10 kV	10 kV	10 kV	10 kV	10 kV
Insulation Voltage	10 kV	10 kV	10 kV	10 kV	10 kV
Inner Conductor DC Resistance	1.00 Ω/km	1.00 Ω/km	1.00 Ω/km	1.00 Ω/km	1.00 Ω/km
Outer Conductor DC Resistance	0.70 Ω/km	2.20 Ω/km	2.20 Ω/km	2.20 Ω/km	2.20 Ω/km
Stop Bands	–	At approximately 640 MHz and its multiples	At approximately 1270 MHz and its multiples	At approximately 1033 MHz and its multiples	At approximately 650 MHz and its multiples
VSWR					
0.3~0.5 GHz	≤1.15	≤1.20	–	–	≤1.20
0.8~1.0 GHz	≤1.15	≤1.20	≤1.20	≤1.20	≤1.20
1.7~2.0 GHz	≤1.20	–	≤1.20	≤1.20	–
2.0~2.6 GHz	≤1.20	–	≤1.25	≤1.25	–

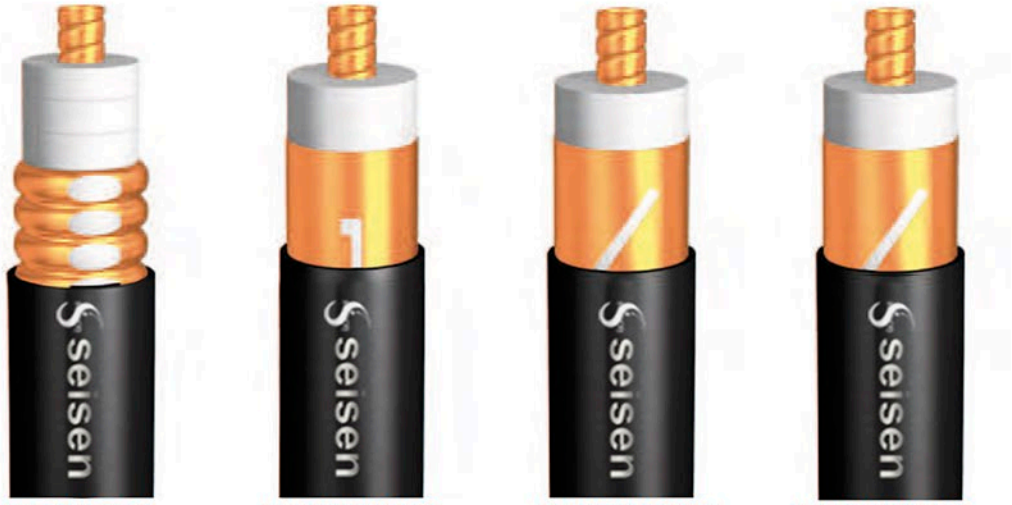
PERFORMANCE

ATTENUATION 20°C (dB/100m)					
75 MHz	0.80	1.00	–	–	–
150 MHz	1.10	1.35	–	–	1.05
450 MHz	2.50	2.30	–	–	1.90
800 MHz	3.30	4.00	2.90	2.65	2.85
900 MHz	3.50	4.35	3.00	3.00	3.15
1800 MHz	5.00	–	6.00	4.90	–
2200 MHz	5.90	–	–	6.15	–
2400 MHz	6.50	–	7.60	7.70	–

COUPLING LOSS (2m) (50%/95%)					
75 MHz	61 dB / 71 dB	63 dB / 69 dB	–	–	–
150 MHz	64 dB / 74 dB	67 dB / 77dB	–	–	73 dB / 85 dB
450 MHz	75 dB / 85 dB	69 dB / 79 dB	–	–	72 dB / 78 dB
800 MHz	76 dB / 86 dB	61 dB / 72 dB	68 dB / 75 dB	71 dB / 74 dB	67 dB / 71 dB
900 MHz	76 dB / 86 dB	62 dB / 68 dB	67 dB / 73 dB	68 dB / 72 dB	64 dB / 69 dB
1800 MHz	77 dB / 87 dB	–	60 dB / 67 dB	65 dB / 70 dB	–
2200 MHz	77 dB / 87 dB	–	–	65 dB / 68 dB	–
2400 MHz	78 dB / 88 dB	–	61 dB / 69 dB	62 dB / 66 dB	–

LEAKY RF - 1-5/8" - 50

LEAKY RF CABLE



HLHTY(Z)-50-42 (1-5/8")
HLHTY(Z)(R)-50-42 (1-5/8")
HLHTY(Z)(R)-50-42 (1-5/8")
HLHTY(Z)(R)-50-42 (1-5/8")

GENERAL SPECIFICATIONS				
Nominal Size	1-5/8"	1-5/8"	1-5/8"	1-5/8"
Cable Type	Coupling Type	Radiating A Type	Radiating C Type	Radiating D Type

CONSTRUCTION MATERIALS				
Inner Conductor	Helical Copper Tube	Helical Copper Tube	Helical Copper Tube	Helical Copper Tube
Dielectric	Physical Foam Polyethylene	Physical Foam Polyethylene	Physical Foam Polyethylene	Physical Foam Polyethylene
Outer Conductor	Corrugated Copper Tube and Slot	Overlapping Copper Foil	Overlapping Copper Foil	Overlapping Copper Foil
Jacket	Black PE or Low Smoke Halogen-free Fire-retardant	Black PE or Low Smoke Halogen-free Fire-retardant	Black PE or Low Smoke Halogen-free Fire-retardant	Black PE or Low Smoke Halogen-free Fire-retardant

PHYSICAL DIMENSIONS				
Inner Conductor Diameter	17.40 mm	17.40 mm	17.40 mm	17.40 mm
Dielectric Diameter	42.80 mm	43.00 mm	43.00 mm	43.00 mm
Outer Conductor Diameter	46.50 mm	43.80 mm	43.80 mm	43.80 mm
Diameter Over Jacket	49.50 mm	48.30 mm	48.30 mm	48.30 mm

MECHANICAL AND ENVIRONMENTAL SPECIFICATIONS				
Minimum Bending Radius	510 mm	510 mm	510 mm	510 mm
Repeated Bending Radius	900 mm	900 mm	900 mm	900 mm
Minimum Distance to Wall	50 mm	50 mm	50 mm	50 mm
Tensile Strength	3300 N	3300 N	3300 N	3300 N
Storage Temperature	-55 °C ~ +85 °C	-55 °C ~ +85 °C	-55 °C ~ +85 °C	-55 °C ~ +85 °C
Installation Temperature	-40 °C ~ +60 °C	-40 °C ~ +60 °C	-40 °C ~ +60 °C	-40 °C ~ +60 °C
Operation Temperature	-55 °C ~ +85 °C	-55 °C ~ +85 °C	-55 °C ~ +85 °C	-55 °C ~ +85 °C

LEAKY RF - 1-5/8" - 50

	HLHTY(Z)-50-42 (1-5/8")	HLHTY(Z)(R)-50-42 (1-5/8")	HLHTY(Z)(R)-50-42 (1-5/8")	HLHTY(Z)(R)-50-42 (1-5/8")
ELECTRICAL SPECIFICATIONS				
Capacitance	76 pF/m	75 pF/m	75 pF/m	75 pF/m
Impedance	50 ± 1 Ω	50 ± 2 Ω	50 ± 2 Ω	50 ± 2 Ω
Velocity	88%	88%	88%	88%
Insulation Resistance	>5000 MΩ•km	>5000 MΩ•km	>5000 MΩ•km	>5000 MΩ•km
Jacket Spark	10 kV	10 kV	10 kV	10 kV
Insulation Voltage	15 kV	15 kV	15 kV	15 kV
Inner Conductor DC Resistance	1.35 Ω/km	1.35 Ω/km	1.35 Ω/km	1.35 Ω/km
Outer Conductor DC Resistance	0.60 Ω/km	1.50 Ω/km	1.50 Ω/km	1.50 Ω/km
Stop Bands	–	At approximately 660 MHz and its multiples	At approximately 1033 MHz and its multiples	At approximately 660 MHz and its multiples
VSWR				
0.3 ~ 0.5 GHz	≤1.15	≤1.20	–	≤1.20
0.8 ~ 1.0 GHz	≤1.15	≤1.20	≤1.20	≤1.20
1.7 ~ 2.0 GHz	≤1.20	–	≤1.20	–
2.0 ~ 2.4 GHz	≤1.20	–	≤1.25	–

PERFORMANCE

ATTENUATION 20°C (dB/100m)				
75 MHz	0.60	0.83	–	–
150 MHz	0.80	0.95	–	0.88
450 MHz	1.90	1.90	–	1.70
800 MHz	2.60	2.80	2.30	2.80
900 MHz	2.70	3.20	2.50	2.90
1800 MHz	4.40	–	4.30	–
2200 MHz	5.10	–	5.60	–
2400 MHz	5.50	–	6.00	–

COUPLING LOSS (2m) (50%/95%)				
75 MHz	68 dB / 78 dB	–	–	–
150 MHz	71 dB / 81 dB	71 dB / 80 dB	–	78 dB / 88 dB
450 MHz	75 dB / 85 dB	70 dB / 79 dB	–	69 dB / 73 dB
800 MHz	75 dB / 85 dB	65 dB / 73 dB	69 dB / 73 dB	66 dB / 69 dB
900 MHz	75 dB / 84 dB	63 dB / 72 dB	68 dB / 72 dB	65 dB / 67f dB
1800 MHz	77 dB / 86 dB	–	65 dB / 68 dB	–
2200 MHz	77 dB / 86 dB	–	63 dB / 67 dB	–
2400 MHz	77 dB / 86 dB	–	62 dB / 64 dB	–

CONTACT US

Our worldwide network of partners and local offices are at your service. To find out the closest partner to you, please contact our main sales offices in Spain.

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