



# CERAFIL® CN8

Miniature ceramic insulated wires  
for very high temperatures

- Operating temp. -90°C to +500°C \*
- Miniature size, weighing far less
- Excellent radiation resistance
- Totally non-combustible at temperatures over 1,000°C  
CERAFIL® may melt but cannot catch fire• Inert to usual and organic solvents

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**Construction**

- 1 - Copper / nickel support
- 2 - Cerafil® insulation

**OMERIN INNOVATION**

CERAFIL®, a ceramic-insulated wire for very high temperatures is the result of several years of research in our laboratory. Our team of engineers has developed ground-breaking technology that deposits ceramic on a lead wire of very small diameter (from AWG 41)

**A FEW PRECAUTIONS WHEN USING**

Ceramic is very different from traditional insulations. It is a rigid, hydrophilic material that requires special care when using. CERAFIL® must be stored in a dry environment and handled with care, without mechanical mistreatment (folding, traction, etc.). It must be stripped using fine grain sandpaper. Do not hesitate to contact us for further information.



Use: This miniature and very high temperature wire has been designed to allow the manufacturing of extremely reliable windings capable of withstanding any thermal overload (mechanical heating, short-circuit, location with thermal risk, etc.). In addition, thermocouple cables with CERAFIL® type ceramic insulation can be made upon request to measure temperature in contained environments subject to extreme heat

**Standard products**

Color coding = Grey

Temperature °C	Max. resistivity μΩ/cm	AWG Size	Nominal OD (mm)	Nominal OD (in)	Tolerance (mils)	Approx. linear weight (lbs/ft)	Length (ft/lbs)	Maximum tensile strength (N)	Minimum bending radius (in)	Maximum linear resistance at 20°C (Ω / ft)
20	3.000	41	.088	.003	.079	.023	44,347	.23	.018	2.376
100	4.090	38	.115	.005	.079	.048	20,834	.47	.024	1.164
200	5.180	36	.138	.005	.079	.068	14,734	.67	.028	.808
300	6.270	34	.168	.007	.079	.108	9,241	1.06	.033	.517
400	7.360	34	.188	.007	.079	.136	7,366	1.36	.037	.403
		32	.218	.009	.079	.192	5,209	1.88	.043	.291
		30	.268	.011	.079	.299	3,333	2.95	.053	.186
		28	.318	.013	.079	.428	2,336	4.24	.063	.129
		27	.368	.014	.079	.579	1,726	5.77	.073	.095
		26	.418	.016	.079	.763	1,310	7.54	.083	.073
		25	.468	.018	.079	.962	1,039	9.55	.093	.058
		24	.518	.020	.079	1.178	848	11.78	.102	.047
		23	.568	.022	.079	1.413	707	14.25	.112	.038
		22	.618	.024	.079	1.678	595	16.96	.122	.032
		22	.668	.026	.079	1.946	513	19.91	.132	.027
		21	.718	.028	.079	2.253	443	23.09	.142	.024
		20	.768	.030	.079	2.582	387	26.51	.152	.021
		20	.818	.032	.079	2.919	342	30.16	.161	.018
		19	.918	.036	.079	3.903	256	38.17	.181	.014
		18	1.018	.040	.079	4.834	207	47.12	.201	.012

\* Note : +800°C during 240 h minimum,  
Peak temperature +1,000°C.  
At temperature > 315°C after extended use,  
CERAFIL® can experience migration  
of the nickel that may cause its max. resistivity to increase  
(please consult us for more information)



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