Percon®19 Copper Alloy Conductor Wire

Introduction

Percon® 19 is a cadmium free copper alloy developed to replace cadmium copper C162.

Key Attributes

- Engineered to be hard drawn for high strength and high flex life, exceeding the performance of cadmium copper.
- Greater and more uniform flex life than cadmium copper.
- Excellent resistance to corrosive environments.
- Does not contain any cadmium or environmentally hazardous elements.

Percon 19 is available hard drawn, bare or plated with nickel, tin, silver or gold. To learn more please contact our sales department.

Fisk Alloy Wire Inc.
P.O. Box 26
10 Thomas Road N.
Hawthorne, NJ 07506 U.S.A.

Phone: (973) 825-8500
Fax: (973) 427-4585
E-mail: sales@fiskalloy.com

©2026 Fisk Alloy Wire Inc.
Percon is a registered trademark of Fisk Alloy Wire Inc.
Information provided on this page is for reference purposes only.

Percon®19 Copper Alloy Conductor Wire

Physical Properties

HARD	
Available Platings	Ag, Ni, Sn
Elongation	1%
Tensile	110 ksi
Electrical Conductivity	73% IACS @ 68 °F
Electrical Resistivity	14.2 Ω-cmil/ft @ 68 ºF
Density	0.321 lb/in³
Coefficient of Thermal Resistance	0.00169 per °F
Melting Point (Solidus)	1,850 °F
Melting Point (Liquidus)	1,958 °F

Fisk Alloy Wire Inc.
P.O. Box 26
10 Thomas Road N.
Hawthorne, NJ 07506 U.S.A.

Phone: (973) 825-8500
Fax: (973) 427-4585
E-mail: sales@fiskalloy.com

©2026 Fisk Alloy Wire Inc.
Percon is a registered trademark of Fisk Alloy Wire Inc.
Information provided on this page is for reference purposes only.

Percon®19 Copper Alloy Conductor Wire

19-Strand

BARE PERCON 19 - HARD TEMPER							
AWG	CONST	DIAMETER (inch)			RESIST (Ω/mft)	WEIGHT (lb/mft)	BREAK STRG (lb)
		Nom	Min	Max	Max	Max	Min
18	19/30	0.0472	0.0467	0.0477	7.98	5.77	160
20	19/32	0.0378	0.0372	0.0383	12.5	3.71	102
22	19/34	0.0298	0.0292	0.0303	20.4	2.33	63.0
24	19/36	0.0236	0.0231	0.0241	32.6	1.47	39.4
26	19/38	0.0189	0.0184	0.0194	51.4	0.951	24.9
28	19/40	0.0151	0.0142	0.0160	86.9	0.606	14.7
30	19/42	0.0118	0.0113	0.0123	136	0.383	9.45
32	19/44(1)	0.0100	0.00950	0.0105	212	0.260	5.92
34	19/46(1)	0.00790	0.00740	0.00840	337	0.164	3.55
(1) True Concentric							

7-Strand

BARE PERCON 19 - HARD TEMPER							
AWG	CONST	DIAMETER (inch)			RESIST (Ω/mft)	WEIGHT (lb/mft)	BREAK STRG (lb)
		Nom	Min	Max	Max	Max	Min
22	7/30	0.0300	0.0297	0.0303	21.1	2.22	59.2
24	7/32	0.0240	0.0237	0.0243	32.9	1.42	37.7
26	7/34	0.0189	0.0186	0.0192	53.5	0.886	23.2
28	7/36	0.0150	0.0147	0.0153	85.6	0.562	14.5
30	7/38	0.0120	0.0117	0.0123	136	0.363	9.19
32	7/40	0.00930	0.00900	0.00960	229	0.222	5.44
34	7/42	0.00750	0.00720	0.00780	357	0.147	3.48

Fisk Alloy Wire Inc.
P.O. Box 26
10 Thomas Road N.
Hawthorne, NJ 07506 U.S.A.

Phone: (973) 825-8500
Fax: (973) 427-4585
E-mail: sales@fiskalloy.com

©2026 Fisk Alloy Wire Inc.
Percon is a registered trademark of Fisk Alloy Wire Inc.
Information provided on this page is for reference purposes only.

Percon®19 Copper Alloy Conductor Wire

7-Strand

BARE PERCON 19 - HARD TEMPER							
AWG	CONST	DIAMETER (inch)			RESIST (Ω/mft)	WEIGHT (lb/mft)	BREAK STRG (lb)
		Nom	Min	Max	Max	Max	Min
36	7/44	0.00600	0.00570	0.00630	570	0.0950	2.18
38	7/46	0.00470	0.00440	0.00492	952	0.0598	1.31
40	7/48	0.00370	0.00340	0.00390	1,582	0.0385	0.786
42	7/50	0.00290	0.00270	0.00312	2,596	0.0255	0.479

Single End

BARE PERCON 19 - HARD TEMPER							
AWG	CONST	DIAMETER (inch)			RESIST (Ω/mft)	WEIGHT (lb/mft)	BREAK STRG (lb)
		Nom	Min	Max	Max	Max	Min
30	SE	0.0100	0.00990	0.0101	145	0.309	8.46
31	SE	0.00890	0.00880	0.00900	184	0.246	6.69
32	SE	0.00800	0.00790	0.00810	228	0.199	5.39
33	SE	0.00710	0.00690	0.00720	290	0.157	4.23
34	SE	0.00630	0.00620	0.00640	370	0.124	3.32
35	SE	0.00560	0.00550	0.00570	470	0.0983	2.61
36	SE	0.00500	0.00490	0.00510	592	0.0787	2.07
37	SE	0.00450	0.00435	0.00460	751	0.0640	1.63
38	SE	0.00400	0.00390	0.00410	935	0.0510	1.31
39	SE	0.00350	0.00340	0.00363	1,229	0.0399	0.999
40	SE	0.00310	0.00300	0.00320	1,580	0.0310	0.777
41	SE	0.00280	0.00270	0.00290	1,950	0.0255	0.629
42	SE	0.00250	0.00240	0.00260	2,470	0.0205	0.497

Fisk Alloy Wire Inc.
P.O. Box 26
10 Thomas Road N.
Hawthorne, NJ 07506 U.S.A.

Phone: (973) 825-8500
Fax: (973) 427-4585
E-mail: sales@fiskalloy.com

©2026 Fisk Alloy Wire Inc.
Percon is a registered trademark of Fisk Alloy Wire Inc.
Information provided on this page is for reference purposes only.

Single End

BARE PERCON 19 - HARD TEMPER							
AWG	CONST	DIAMETER (inch)			RESIST (Ω/mft)	WEIGHT (lb/mft)	BREAK STRG (lb)
		Nom	Min	Max	Max	Max	Min
43	SE	0.00220	0.00210	0.00232	3,222	0.0163	0.381
44	SE	0.00200	0.00190	0.00210	3,940	0.0134	0.311
45	SE	0.00180	0.00166	0.00190	5,160	0.0105	0.238
46	SE	0.00160	0.00147	0.00167	6,575	0.00844	0.187
47	SE	0.00140	0.00130	0.00150	8,406	0.00680	0.146
48	SE	0.00120	0.00110	0.00130	10,932	0.00543	0.112
49	SE	0.00110	0.00100	0.00120	13,927	0.00443	0.0880
50	SE	0.00100	0.000890	0.00109	17,936	0.00360	0.0680

Fisk Alloy Wire Inc.
P.O. Box 26
10 Thomas Road N.
Hawthorne, NJ 07506 U.S.A.

Phone: (973) 825-8500
Fax: (973) 427-4585
E-mail: sales@fiskalloy.com

©2026 Fisk Alloy Wire Inc.
Percon is a registered trademark of Fisk Alloy Wire Inc.
Information provided on this page is for reference purposes only.