

TANW Data Sheet

General Properties

Wire Diameter (um)	100	125	150	175	200	250	300	350	380	400	450	500
Type	Soft1				Soft2							
Tolerance (um)	+/- 5.0				+/- 7.0							+/- 10.0
Breaking Load (gf)	Room Temp.											
Elongation (%)	50-80	70-120	100-200	140-240	140-200	210-300	300-420	450-550	500-700	550-750	700-850	800-1,100
maximum winding length (m)	1,000 / No.88B				800 / No.88			500 / No.88			300 / No.88	

Physical Property

Hardness (HV)	Wire	20 - 40				15 - 35							
Density (g/cm ³)		2.7											
Resistivity (u Ω cm) @ 20°C		2.7											
Fusing Current (A, Length=10mm,10sec)		1.7	2.6	3.7	5.1	6.6	10	15	20	24	26	34	41
Electrical resistance (m Ω, Length 10mm, Room Temp.)		31.2 - 38.1	20.3 - 23.9	14.3 - 16.4	10.6 - 11.9	8.2 - 9.0	5.2 - 5.8	3.6 - 4.0	2.7 - 2.9	2.3 - 2.5	2.1 - 2.2	1.6 - 1.8	1.3 - 1.4
Thermal Conductivity @ 20°C (W/m/K)		238											
Linear Expansion Coefficient (0-100°C) (ppm/K)		23.5											
Elastic Modulus (GPa)		30 - 50				10 - 40				5 - 20			
Melting Point (°C)		660											

TDS TANW rev.2 20230524

TABN Data Sheet

General Properties

Wire Diameter (um)	18	20	25	30	32	35	38	40	50	80
Tolerance (um)	+/- 1.0							+/- 2.0		+/- 3.0
Weight (mg/200mm)	0.12-0.15	0.15-0.19	0.24-0.29	0.36-0.41	0.41-0.46	0.49-0.55	0.58-0.65	0.61-0.75	0.98-1.15	2.51-2.92
Breaking Load (gf)	Room Temp.									
Elongation (%)	6.7 - 7.5	8.0 - 10.0	13.0 - 15.0	17.0 - 19.0	19.0 - 21.0	26.0 - 29.0	31.0 - 34.0	34.0 - 38.0	47.0 - 53.0	130 - 150
	0.5 - 4.5					0.5 - 5.0			0.5 - 6.0	

Physical Property

Hardness (HV)	Wire	20 - 40									
Density (g/cm ³)		2.7									
Resistivity (u Ω cm) @ 20°C		3.1									
Fusing Current (A, Length=3mm,10sec)		0.3	0.4	0.6	0.8	0.9	1.1	1.3	1.4	2.2	5.8
Electrical resistance (Ω, Length 10mm, Room Temp.)		1.09 - 1.37	0.90 - 1.09	0.58 - 0.69	0.41 - 0.47	0.36 - 0.41	0.30 - 0.34	0.26 - 0.29	0.22 - 0.27	0.15 - 0.17	0.06 - 0.07
Thermal Conductivity @ 20°C (W/m/K)		207									
Linear Expansion Coefficient (0-100°C) (ppm/K)		23.6									
Elastic Modulus (GPa)		15 - 40									
Melting Point (°C)		654									

TDS TABN rev.2 20230524

TABR Data Sheet

General Properties

Width (mm)	0.50	0.75	1.00	1.00	1.50	1.50	1.50	1.50	1.50	2.00	2.00	2.00	2.00	2.00	2.00	
Tolerance (mm)	+/-0.050	+/-0.050	+/-0.050	+/-0.050	+/-0.075	+/-0.075	+/-0.075	+/-0.075	+/-0.075	+/-0.100	+/-0.100	+/-0.100	+/-0.100	+/-0.100	+/-0.100	
Thickness (mm)	0.10	0.10	0.10	0.20	0.10	0.15	0.20	0.25	0.30	0.10	0.15	0.20	0.25	0.30	0.40	
Tolerance (mm)	+/-0.010	+/-0.010	+/-0.010	+/-0.020	+/-0.010	+/-0.015	+/-0.020	+/-0.025	+/-0.030	+/-0.010	+/-0.015	+/-0.020	+/-0.025	+/-0.030	+/-0.040	
Breaking Load (gf)	275-425	413-638	550-850	900-1500	675-1,125	1,013-1,688	1,350-2,250	1,688-2,813	2,025-3,375	900-1,500	1,350-2,250	1,800-3,000	2,250-3,750	2,700-4,500	3,600-6,000	
Elongation (%)	Room Temp. 10.0 ≤															
maximum winding length (m)	No.88	200	300	200	100	100	100	100	100	50	100	100	100	50	50	50
	No.120	—	500	600	500	600	500	400	300	250	500	400	300	200	200	150

Physical Property

Hardness (HV)	Ribbon	15 - 30														
Density (g/cm ³)		2.7														
Resistivity (uΩ cm) @ 20°C		2.7														
Fusing Current (A, Length=10mm,10sec)		11	16	21	42	32	48	63	79	95	42	63	85	106	127	169
Electrical resistance (mΩ, Length 10mm, Room Temp.)		4.5 -6.7	3.1 -4.3	2.3 -3.2	1.2 -1.6	1.6 -2.1	1.0 -1.4	0.8 -1.1	0.6 -0.8	0.5 -0.7	1.2 -1.6	0.8 -1.1	0.6 -0.8	0.5 -0.6	0.4 -0.5	0.3 -0.4
Thermal Conductivity @ 20°C (W/m/K)		238														
Linear Expansion Coefficient (0-100°C) (ppm/K)		23.5														
Elastic Modulus (GPa)		20 - 50														
Melting Point (°C)		660														

CP-1 Data Sheet

General Properties

Wire Diameter (um)	200	250	300	350	380	400	450	500
Tolerance (um)	+/- 7.0							+/- 10.0
Breaking Load (gf)	510-917	816-1427	1326-2039	1734-2651	2040-3059	2346-3365	3264-4282	4079-5302
Elongation (%)	5.0 - 35.0			10.0 - 40.0				10.0-50.0
maximum winding length (m)	300							200

Physical Property

Hardness (HV)	Wire	60 - 80							
Density (g/cm ³)		8.92							
Resistivity (uΩ cm) @ 20°C		1.7							
Fusing Current (A, Length=10mm,10sec)		8.8	14	20	27	32	35	44	55
Electrical resistance (mΩ, Length 10mm, Room Temp.)		5.1 - 5.8	3.3 - 3.7	2.3 - 2.5	1.7 - 1.8	1.4 - 1.6	1.3 - 1.4	1.0 - 1.1	0.8 - 0.9
Thermal Conductivity @ 20°C (W/m/K)		431							
Linear Expansion Coefficient (0-100°C) (ppm/K)		17.0							
Elastic Modulus (GPa)		80 - 100							
Melting Point (°C)		1,083							