

# DNTS(X) Type and DNTSR(X) Type Copper Brush Wire



## Structure and Application

DNTS(X) type and DNTSR(X) type copper brush wires are made from extra-soft T2 copper wires twisted together. They are used for flexible connections in motors, electrical appliances, and instrument circuits, particularly suitable for AC or high-frequency current applications. The DNTS(X) and DNTSR(X) copper brush wires are twisted from T2 copper wires according to the National Standard of the People's Republic of China GB/T12970.4-2009.

## Model Meaning

Material	T2 Copper Wire, Copper Content > 99.95%
Surface Treatment	Bare Copper, Tin-Plated
Packaging Method	Packaged in coils, or on spools or wooden reels

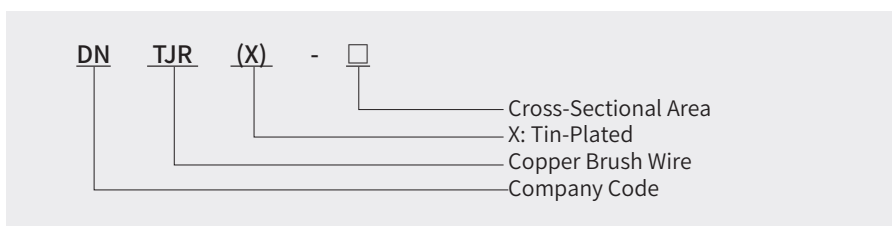
## Specifications and Model

Product Model	Single Wire Diameter (mm)	Elongation, not less than
DNTS	0.10mm(American Wire Gauge AWG38)	18%
DNTSX	0.10mm(American Wire Gauge AWG38)	15%
DNTSR(X)	0.05mm(American Wire Gauge AWG44), 0.07mm(American Wire Gauge AWG41)	15%

Note: Customizable according to customer requirements

# DNTS(X) Type Copper Brush Wire

## Model Meaning

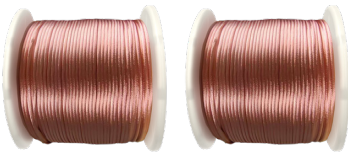


## Single Wire Diameter: 0.10mm (American Wire Gauge AWG38)

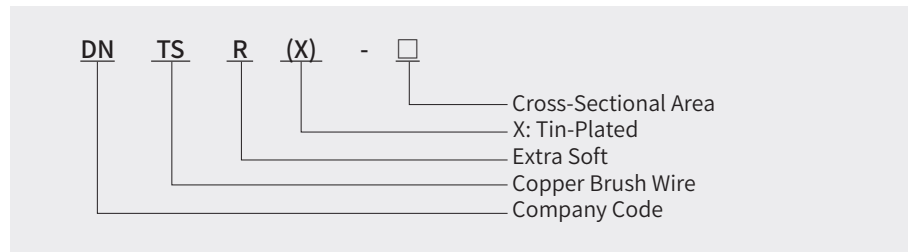
Product Model	Nominal Cross-Sectional Area (mm <sup>2</sup> )	Calculate Cross-Sectional Area (mm <sup>2</sup> )	Wire Structure		Calculated Outer Diameter (mm)	Maximum DC Resistance at 20°C Ω/km		Calculated Weight (kg/km)
			Total Number of Wires	Strands × Wires per Strand/ Single Wire Diameter (mm)		DNTJR2	DNTJR2	
DNTS(X)-1	1	0.99	126	7×12/0.10	1.4	18.5	19.3	9.5
DNTS(X)-1.4	1.4	1.37	175	7×25/0.10	1.7	13.2	13.7	12.5
DNTS(X)-1.5	1.5	1.48	189	7×27/0.10	1.8	11.9	12.7	14.0
DNTS(X)-1.8	1.8	1.75	224	7×32/0.10	2.0	10.2	10.7	16.5
DNTS(X)-2	2	1.98	252	7×36/0.10	2.2	9.23	9.65	19.5
DNTS(X)-2.5	2.5	2.53	322	7×46/0.10	2.4	7.39	7.72	25.0
DNTS(X)-3	3	2.97	378	7×54/0.10	2.7	6.16	6.43	29.5
DNTS(X)-4	4	3.96	504	7×72/0.10	2.8	4.62	4.83	38.0
DNTS(X)-5	5	4.94	630	7×90/0.10	3.2	3.69	3.86	47.6
DNTS(X)-6	6	5.93	756	12×63/0.10	3.7	3.01	3.23	58.5
DNTS(X)-8	8	7.91	1008	12×84/0.10	4.2	2.33	2.44	75.5
DNTS(X)-9	9	8.95	1140	12×95/0.10	4.4	2.05	2.15	87.0
DNTS(X)-10	10	8.89	1260	12×105/0.10	4.8	1.83	1.91	97.2
DNTS(X)-12	12	11.97	1524	12×127/0.10	5.4	1.50	1.62	117.0
DNTS(X)-16	16	15.90	2025	12×135/0.10	6.2	1.16	1.21	156.0

Note: Customizable according to customer requirements

# DNTSR(X) Type Copper Brush Wire



## Model Meaning



### Round: Single Wire Diameter: 0.07mm (American Wire Gauge AWG41)

Product Model	Nominal Cross-Sectional Area (mm <sup>2</sup> )	Calculate Cross-Sectional Area (mm <sup>2</sup> )	Wire Structure		Calculated Outer Diameter (mm)	Maximum DC Resistance at 20°C Ω/km		Calculated Weight (kg/km)
			Total Number of Wires	Strands × Wires per Strand/ Single Wire Diameter (mm)		DNTJR2	DNTJR2	
DNTSR(X)-2	2	1.93	504	7×72/0.07	2.2	9.16	9.65	18.3
		1.93	504	7×3×24/0.07	2.2	9.16	9.65	18.6
DNTSR(X)-3.5	3.5	3.47	903	7×3×43/0.07	2.7	5.35	5.51	33.3
DNTSR(X)-4	4	4.01	1044	12×3×29/0.07	2.9	4.59	4.83	39.0
		4.03	1050	7×3×50/0.07	3.0	4.59	4.83	39.0
DNTSR(X)-5	5	4.84	1260	7×3×60/0.07	3.2	3.71	3.86	46.5
		5.02	1305	15×3×29/0.07	3.2	3.71	3.86	48.5
DNTSR(X)-6	6	5.65	1470	7×3×70/0.07	3.6	2.93	3.21	54.2
DNTSR(X)-8	8	7.75	2016	12×3×56/0.07	4.2	2.33	2.44	73.0
DNTSR(X)-10	10	9.69	2520	12×3×70/0.07	4.8	1.83	1.91	90.5
DNTSR(X)-12	12	11.90	3096	12×3×86/0.07	5.4	1.50	1.60	112.2
DNTSR(X)-16	16	15.34	3990	19×3×70/0.07	6.2	1.16	1.21	150.5

Note: Customizable according to customer requirements

## Copper Brush Wire

### Single Wire Diameter: 0.05mm (American Wire Gauge AWG44)

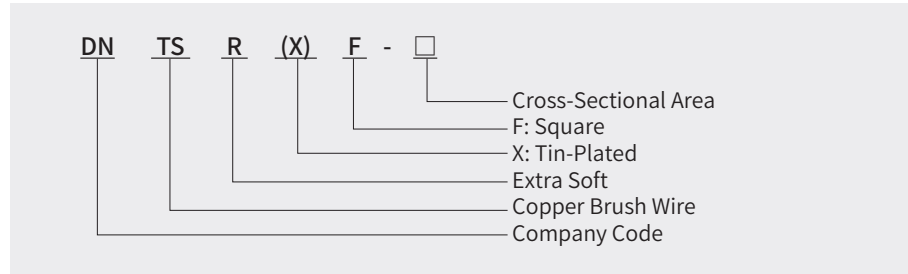
Product Model	Nominal Cross-Sectional Area (mm <sup>2</sup> )	Calculate Cross-Sectional Area (mm <sup>2</sup> )	Wire Structure		Calculated Outer Diameter (mm)	Maximum DC Resistance at 20°C Ω/km		Calculated Weight (kg/km)
			Total Number of Wires	Strands × Wires per Strand/ Single Wire Diameter (mm)		DNTJR2	DNTJR2	
DNTSR(X)-1	1	0.99	504	7×3×24/0.05	1.4	18.5	19.3	9.3
DNTSR(X)-1.3	1.3	1.32	672	7×3×32/0.05	1.7	14.2	14.8	12.5
DNTSR(X)-1.5	1.5	1.48	756	7×3×36/0.05	1.8	11.9	12.7	14.0
DNTSR(X)-1.8	1.8	1.81	924	7×3×44/0.05	2.0	10.2	10.7	17.5
DNTSR(X)-2	2	1.98	1008	7×3×48/0.05	2.2	9.16	9.65	19.0
DNTSR(X)-2.5	2.5	2.30	1176	7×3×56/0.05	2.3	7.39	7.72	22.5
DNTSR(X)-3	3	2.95	1505	7×5×0.43/0.05	2.6	6.16	6.43	29.0
DNTSR(X)-4	4	3.95	2016	12×3×56/0.05	2.7	4.59	4.83	39.0
DNTSR(X)-5	5	4.94	2520	15×3×56/0.05	3.2	3.71	3.86	48.5
DNTSR(X)-6	6	6.26	3192	19×3×56/0.05	3.6	2.93	3.21	60.0
DNTSR(X)-8	8	8.05	4104	19×3×72/0.05	4.2	2.33	2.44	78.5
DNTSR(X)-10	10	10.00	5096	7×7×104/0.05	4.8	1.83	1.91	97.0
		10.07	5130	19×3×90/0.05	4.8	1.83	1.91	97.8
DNTSR(X)-12	12	12.08	6156	19×3×108/0.05	5.4	1.50	1.60	117.0

Note: Customizable according to customer requirements

# DNTSR(X)F Type Copper Brush Wire



## Model Meaning



### Square: Single Wire Diameter: 0.05mm (American Wire Gauge AWG44)

Product Model	Nominal Cross-Sectional Area (mm <sup>2</sup> )	Calculate Cross-Sectional Area (mm <sup>2</sup> )	Wire Structure		Calculated Outer Diameter (mm)	Maximum DC Resistance at 20°C Ω/km		Calculated Weight (kg/km)
			Total Number of Wires	Strands X Wires per Strand/ Single Wire Diameter (mm)		DNTJR2	DNTJR2	
DNTSR(X)F-1	1	1.00	512	8×64/0.05	1.5×1.5	18.5	19.3	9.3
DNTSR(X)F-1.5	1.5	1.50	768	8×96/0.05	1.9×1.9	11.9	12.7	14.0
DNTSR(X)F-2	2	2.00	1024	8×128/0.05	2.2×2.2	9.16	9.65	18.6
DNTSR(X)F-2.5	2.5	2.51	1280	8×160/0.05	2.4×2.4	7.39	7.72	23.4
DNTSR(X)F-3	3	3.29	1680	8×210/0.05	2.8×2.8	6.16	6.43	30.7
DNTSR(X)F-4	4	4.00	2040	8×255/0.05	3.2×3.2	4.59	4.83	37.3
DNTSR(X)F-5	5	5.02	2560	8×2×160/0.05	3.4×3.4	3.71	3.86	46.8
DNTSR(X)F-6	6	6.09	3136	8×2×194/0.05	3.7×3.7	2.93	3.21	56.8
DNTSR(X)F-10	10	10.04	5120	8×5×128/0.05	5.5×5.5	1.83	1.91	93.7
DNTSR(X)F-16	16	16.07	8192	8×8×128/0.05	8.2×8.2	1.16	1.21	150.0
DNTSR(X)F-20	20	20.09	10240	8×10×128/0.05	9.2×9.2	0.925	0.965	187.5
DNTSR(X)F-25	25	24.11	12288	8×12×128/0.05	10.1×10.1	0.736	0.769	225.0
DNTSR(X)F-30	30	30.14	15360	8×15×128/0.05A	10.7×10.7	0.616	0.636	281.3

Note: Customizable according to customer requirements