

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**0.050**

Approximate AWG\* Number  
\*American Wire Gauge

**44**

Approximate SWG Number

**47**

Cir Mils **3.88**

Sq Mils **3.05**

Sq MM **0.00197**

Sq Cm **0.0000197**

Sq Inches **0.000003046**

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	0.0500	0.0020
Nominal Coated Wire Diameter (Single Build)	0.0600	0.0024
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	0.0679	0.0027
Width of Slot for Machine Insertion	0.0000	0.0000
Length of Cut for Radius Cut	0.2317	0.0091
Depth of Cut for Radius Cut	0.2173	0.0086
Depth of Cut for Non-Radius Cut	0.1929	0.0076
Fusing Electrode Tip Diameter	0.0841	0.0033
Orient Blade Thickness for Machine Insertion	0.0000	0.0000
Stuffing Blade Thickness for Machine Insertion	0.0000	0.0000
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	0.1903	0.0075
Minimum Tang Width	0.0515	0.0020
Minimum Tang Thickness	0.0491	0.0019
Minimum Tang Radius	0.0340	0.0013
Height of Tang Projection for Aluminum Wire ± 5%	0.0358	0.0014

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**0.063**

Approximate AWG\* Number  
\*American Wire Gauge

**42**

Approximate SWG Number

**46**

Cir Mils **6.15**

Sq Mils **4.83**

Sq MM **0.00311**

Sq Cm **0.0000311**

Sq Inches **0.000004828**

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	0.0630	0.0025
Nominal Coated Wire Diameter (Single Build)	0.0760	0.0030
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	0.0860	0.0034
Width of Slot for Machine Insertion	0.0000	0.0000
Length of Cut for Radius Cut	0.2934	0.0116
Depth of Cut for Radius Cut	0.2753	0.0108
Depth of Cut for Non-Radius Cut	0.2443	0.0096
Fusing Electrode Tip Diameter	0.1065	0.0042
Orient Blade Thickness for Machine Insertion	0.0000	0.0000
Stuffing Blade Thickness for Machine Insertion	0.0000	0.0000
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	0.2411	0.0095
Mimumun Tang Width	0.0649	0.0026
Minimum Tang Thickness	0.0618	0.0024
Minimum Tang Radius	0.0431	0.0017
Height of Tang Projection for Aluminum Wire ± 5%	0.0452	0.0018

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**0.071**

Approximate AWG\* Number  
\*American Wire Gauge

**41**

Approximate SWG Number

**45**

Cir Mils **7.84**

Sq Mils **6.16**

Sq MM **0.00397**

Sq Cm **0.0000397**

Sq Inches **0.000006154**

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	0.0710	0.0028
Nominal Coated Wire Diameter (Single Build)	0.0840	0.0033
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	0.0950	0.0037
Width of Slot for Machine Insertion	0.0000	0.0000
Length of Cut for Radius Cut	0.3243	0.0128
Depth of Cut for Radius Cut	0.3042	0.0120
Depth of Cut for Non-Radius Cut	0.2701	0.0106
Fusing Electrode Tip Diameter	0.1177	0.0046
Orient Blade Thickness for Machine Insertion	0.0000	0.0000
Stuffing Blade Thickness for Machine Insertion	0.0000	0.0000
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	0.2664	0.0105
Mimumun Tang Width	0.0731	0.0029
Minimum Tang Thickness	0.0697	0.0027
Minimum Tang Radius	0.0476	0.0019
Height of Tang Projection for Aluminum Wire ± 5%	0.0509	0.0020

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**0.080**

Approximate AWG\* Number  
\*American Wire Gauge

**40**

Approximate SWG Number

**44**

Cir Mils **9.92**

Sq Mils **7.79**

Sq MM **0.00502**

Sq Cm **0.0000502**

Sq Inches **0.000007787**

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	0.0800	0.0031
Nominal Coated Wire Diameter (Single Build)	0.0940	0.0037
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	0.1063	0.0042
Width of Slot for Machine Insertion	0.0000	0.0000
Length of Cut for Radius Cut	0.3629	0.0143
Depth of Cut for Radius Cut	0.3405	0.0134
Depth of Cut for Non-Radius Cut	0.3022	0.0119
Fusing Electrode Tip Diameter	0.1317	0.0052
Orient Blade Thickness for Machine Insertion	0.0000	0.0000
Stuffing Blade Thickness for Machine Insertion	0.0000	0.0000
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	0.2982	0.0117
Mimumun Tang Width	0.0824	0.0032
Minimum Tang Thickness	0.0785	0.0031
Minimum Tang Radius	0.0533	0.0021
Height of Tang Projection for Aluminum Wire ± 5%	0.0573	0.0023

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**0.090**

Approximate AWG\* Number  
\*American Wire Gauge

**39**

Approximate SWG Number

**43**

Cir Mils **12.60**

Sq Mils **9.90**

Sq MM **0.00638**

Sq Cm **0.0000638**

Sq Inches **0.000009891**

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	0.0900	0.0035
Nominal Coated Wire Diameter (Single Build)	0.1050	0.0041
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	0.1188	0.0047
Width of Slot for Machine Insertion	0.0000	0.0000
Length of Cut for Radius Cut	0.4054	0.0160
Depth of Cut for Radius Cut	0.3803	0.0150
Depth of Cut for Non-Radius Cut	0.3376	0.0133
Fusing Electrode Tip Diameter	0.1471	0.0058
Orient Blade Thickness for Machine Insertion	0.0000	0.0000
Stuffing Blade Thickness for Machine Insertion	0.0000	0.0000
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	0.3331	0.0131
Mimumun Tang Width	0.0927	0.0036
Minimum Tang Thickness	0.0883	0.0035
Minimum Tang Radius	0.0595	0.0023
Height of Tang Projection for Aluminum Wire ± 5%	0.0645	0.0025

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**0.10**

Approximate AWG\* Number  
\*American Wire Gauge

**38**

Approximate SWG Number

**42**

Cir Mils	15.50
Sq Mils	12.17
Sq MM	0.00785
Sq Cm	0.0000785
Sq Inches	0.000012168

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	0.1000	0.0039
Nominal Coated Wire Diameter (Single Build)	0.1170	0.0046
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	0.1323	0.0052
Width of Slot for Machine Insertion	0.0000	0.0000
Length of Cut for Radius Cut	0.4517	0.0178
Depth of Cut for Radius Cut	0.4238	0.0167
Depth of Cut for Non-Radius Cut	0.3762	0.0148
Fusing Electrode Tip Diameter	0.1640	0.0065
Orient Blade Thickness for Machine Insertion	0.0000	0.0000
Stuffing Blade Thickness for Machine Insertion	0.0000	0.0000
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	0.3711	0.0146
Mimumun Tang Width	0.1030	0.0041
Minimum Tang Thickness	0.0981	0.0039
Minimum Tang Radius	0.0663	0.0026
Height of Tang Projection for Aluminum Wire ± 5%	0.0717	0.0028

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**0.112**

Approximate AWG\* Number  
\*American Wire Gauge

**37**

Approximate SWG Number

**40**

Cir Mils **19.40**

Sq Mils **15.24**

Sq MM **0.00983**

Sq Cm **0.0000983**

Sq Inches **0.000015229**

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	0.1120	0.0044
Nominal Coated Wire Diameter (Single Build)	0.1300	0.0051
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	0.1470	0.0058
Width of Slot for Machine Insertion	0.0000	0.0000
Length of Cut for Radius Cut	0.5019	0.0198
Depth of Cut for Radius Cut	0.4709	0.0185
Depth of Cut for Non-Radius Cut	0.4179	0.0165
Fusing Electrode Tip Diameter	0.1822	0.0072
Orient Blade Thickness for Machine Insertion	0.0000	0.0000
Stuffing Blade Thickness for Machine Insertion	0.0000	0.0000
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	0.4124	0.0162
Mimumun Tang Width	0.1154	0.0045
Minimum Tang Thickness	0.1099	0.0043
Minimum Tang Radius	0.0737	0.0029
Height of Tang Projection for Aluminum Wire ± 5%	0.0803	0.0032

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**0.125**

Approximate AWG\* Number  
\*American Wire Gauge

**36**

Approximate SWG Number

**39**

Cir Mils	24.20
Sq Mils	19.01
Sq MM	0.01226
Sq Cm	0.0001226
Sq Inches	0.000018997

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	0.1250	0.0049
Nominal Coated Wire Diameter (Single Build)	0.1440	0.0057
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	0.1629	0.0064
Width of Slot for Machine Insertion	0.0000	0.0000
Length of Cut for Radius Cut	0.5560	0.0219
Depth of Cut for Radius Cut	0.5216	0.0205
Depth of Cut for Non-Radius Cut	0.4630	0.0182
Fusing Electrode Tip Diameter	0.2018	0.0079
Orient Blade Thickness for Machine Insertion	0.0000	0.0000
Stuffing Blade Thickness for Machine Insertion	0.0000	0.0000
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	0.4568	0.0180
Mimumun Tang Width	0.1287	0.0051
Minimum Tang Thickness	0.1227	0.0048
Minimum Tang Radius	0.0816	0.0032
Height of Tang Projection for Aluminum Wire ± 5%	0.0896	0.0035

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.



## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**0.140**

Approximate AWG\* Number  
\*American Wire Gauge

**35**

Approximate SWG Number

**38**

Cir Mils **30.40**

Sq Mils **23.88**

Sq MM **0.01540**

Sq Cm **0.0001540**

Sq Inches **0.000023864**

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	0.1400	0.0055
Nominal Coated Wire Diameter (Single Build)	0.1600	0.0063
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	0.1810	0.0071
Width of Slot for Machine Insertion	0.0000	0.0000
Length of Cut for Radius Cut	0.6178	0.0243
Depth of Cut for Radius Cut	0.5795	0.0228
Depth of Cut for Non-Radius Cut	0.5144	0.0203
Fusing Electrode Tip Diameter	0.2242	0.0088
Orient Blade Thickness for Machine Insertion	0.0000	0.0000
Stuffing Blade Thickness for Machine Insertion	0.0000	0.0000
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	0.5075	0.0200
Mimumun Tang Width	0.1442	0.0057
Minimum Tang Thickness	0.1374	0.0054
Minimum Tang Radius	0.0907	0.0036
Height of Tang Projection for Aluminum Wire ± 5%	0.1003	0.0040

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**0.160**

Approximate AWG\* Number  
\*American Wire Gauge

**34**

Approximate SWG Number

**37**

Cir Mils **39.70**

Sq Mils **31.18**

Sq MM **0.02011**

Sq Cm **0.0002011**

Sq Inches **0.000031165**

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	0.1600	0.0063
Nominal Coated Wire Diameter (Single Build)	0.1820	0.0072
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	0.2058	0.0081
Width of Slot for Machine Insertion	0.0000	0.0000
Length of Cut for Radius Cut	0.7027	0.0277
Depth of Cut for Radius Cut	0.6592	0.0260
Depth of Cut for Non-Radius Cut	0.5851	0.0230
Fusing Electrode Tip Diameter	0.2550	0.0100
Orient Blade Thickness for Machine Insertion	0.0000	0.0000
Stuffing Blade Thickness for Machine Insertion	0.0000	0.0000
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	0.5773	0.0227
Mimumun Tang Width	0.1648	0.0065
Minimum Tang Thickness	0.1570	0.0062
Minimum Tang Radius	0.1031	0.0041
Height of Tang Projection for Aluminum Wire ± 5%	0.1147	0.0045

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**0.180**

Approximate AWG\* Number  
\*American Wire Gauge

**33**

Approximate SWG Number

**36**

Cir Mils **50.40**

Sq Mils **39.58**

Sq MM **0.02553**

Sq Cm **0.0002553**

Sq Inches **0.000039564**

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	0.1800	0.0071
Nominal Coated Wire Diameter (Single Build)	0.2040	0.0080
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	0.2307	0.0091
Width of Slot for Machine Insertion	0.0000	0.0000
Length of Cut for Radius Cut	0.7876	0.0310
Depth of Cut for Radius Cut	0.7389	0.0291
Depth of Cut for Non-Radius Cut	0.6559	0.0258
Fusing Electrode Tip Diameter	0.2859	0.0113
Orient Blade Thickness for Machine Insertion	0.0000	0.0000
Stuffing Blade Thickness for Machine Insertion	0.0000	0.0000
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	0.6471	0.0255
Minimum Tang Width	0.1854	0.0073
Minimum Tang Thickness	0.1766	0.0070
Minimum Tang Radius	0.1156	0.0046
Height of Tang Projection for Aluminum Wire ± 5%	0.1290	0.0051

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**0.20**

Approximate AWG\* Number  
\*American Wire Gauge

**32**

Approximate SWG Number

**36**

Cir Mils	62.00
Sq Mils	48.69
Sq MM	0.03140
Sq Cm	0.0003140
Sq Inches	0.000048670

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	0.2000	0.0079
Nominal Coated Wire Diameter (Single Build)	0.2260	0.0089
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	0.2556	0.0101
Width of Slot for Machine Insertion	0.1924	0.0076
Length of Cut for Radius Cut	0.8726	0.0344
Depth of Cut for Radius Cut	0.8186	0.0322
Depth of Cut for Non-Radius Cut	0.7266	0.0286
Fusing Electrode Tip Diameter	0.3167	0.0125
Orient Blade Thickness for Machine Insertion	0.1876	0.0074
Stuffing Blade Thickness for Machine Insertion	0.1731	0.0068
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	0.7169	0.0282
Mimumun Tang Width	0.2060	0.0081
Minimum Tang Thickness	0.1963	0.0077
Minimum Tang Radius	0.1281	0.0050
Height of Tang Projection for Aluminum Wire ± 5%	0.1433	0.0056

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**0.224**

Approximate AWG\* Number  
\*American Wire Gauge

**31**

Approximate SWG Number

**35**

Cir Mils **77.80**

Sq Mils **61.10**

Sq MM **0.03940**

Sq Cm **0.0003940**

Sq Inches **0.000061073**

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	0.2240	0.0088
Nominal Coated Wire Diameter (Single Build)	0.2520	0.0099
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	0.2850	0.0112
Width of Slot for Machine Insertion	0.2164	0.0085
Length of Cut for Radius Cut	0.9730	0.0383
Depth of Cut for Radius Cut	0.9127	0.0359
Depth of Cut for Non-Radius Cut	0.8102	0.0319
Fusing Electrode Tip Diameter	0.3531	0.0139
Orient Blade Thickness for Machine Insertion	0.2110	0.0083
Stuffing Blade Thickness for Machine Insertion	0.1947	0.0077
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	0.7993	0.0315
Mimumun Tang Width	0.2307	0.0091
Minimum Tang Thickness	0.2198	0.0087
Minimum Tang Radius	0.1428	0.0056
Height of Tang Projection for Aluminum Wire ± 5%	0.1605	0.0063

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**0.250**

Approximate AWG\* Number  
\*American Wire Gauge

**30**

Approximate SWG Number

**33**

Cir Mils **96.90**

Sq Mils **76.11**

Sq MM **0.04908**

Sq Cm **0.0004908**

Sq Inches **0.000076067**

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	0.2500	0.0098
Nominal Coated Wire Diameter (Single Build)	0.2810	0.0111
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	0.3178	0.0125
Width of Slot for Machine Insertion	0.2424	0.0095
Length of Cut for Radius Cut	1.0849	0.0427
Depth of Cut for Radius Cut	1.0178	0.0401
Depth of Cut for Non-Radius Cut	0.9034	0.0356
Fusing Electrode Tip Diameter	0.3938	0.0155
Orient Blade Thickness for Machine Insertion	0.2363	0.0093
Stuffing Blade Thickness for Machine Insertion	0.2181	0.0086
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	0.8913	0.0351
Minimum Tang Width	0.2575	0.0101
Minimum Tang Thickness	0.2453	0.0097
Minimum Tang Radius	0.1592	0.0063
Height of Tang Projection for Aluminum Wire ± 5%	0.1792	0.0071

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**0.280**

Approximate AWG\* Number  
\*American Wire Gauge

**29**

Approximate SWG Number

**32**

Cir Mils	122.00
Sq Mils	95.82
Sq MM	0.06179
Sq Cm	0.0006179
Sq Inches	0.000095770

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	0.2800	0.0110
Nominal Coated Wire Diameter (Single Build)	0.3120	0.0123
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	0.3529	0.0139
Width of Slot for Machine Insertion	0.2724	0.0107
Length of Cut for Radius Cut	1.2046	0.0474
Depth of Cut for Radius Cut	1.1301	0.0445
Depth of Cut for Non-Radius Cut	1.0031	0.0395
Fusing Electrode Tip Diameter	0.4372	0.0172
Orient Blade Thickness for Machine Insertion	0.2656	0.0105
Stuffing Blade Thickness for Machine Insertion	0.2451	0.0097
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	0.9897	0.0390
Minimum Tang Width	0.2884	0.0114
Minimum Tang Thickness	0.2748	0.0108
Minimum Tang Radius	0.1768	0.0070
Height of Tang Projection for Aluminum Wire ± 5%	0.2007	0.0079

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

NON-Standard (IEC) Metric Size  
\*International Electrotechnical Commission

**0.310**

Approximate AWG\* Number  
\*American Wire Gauge

**29**

Approximate SWG Number

**31**

Cir Mils	139.90
Sq Mils	109.88
Sq MM	0.07090
Sq Cm	0.0007090
Sq Inches	0.000109563

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	0.2997	0.0118
Nominal Coated Wire Diameter (Single Build)	0.3277	0.0129
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	0.3706	0.0146
Width of Slot for Machine Insertion	0.2921	0.0115
Length of Cut for Radius Cut	1.2651	0.0498
Depth of Cut for Radius Cut	1.1868	0.0467
Depth of Cut for Non-Radius Cut	1.0534	0.0415
Fusing Electrode Tip Diameter	0.4592	0.0181
Orient Blade Thickness for Machine Insertion	0.2848	0.0112
Stuffing Blade Thickness for Machine Insertion	0.2629	0.0104
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	1.0393	0.0409
Mimumun Tang Width	0.3087	0.0122
Minimum Tang Thickness	0.2941	0.0116
Minimum Tang Radius	0.1857	0.0073
Height of Tang Projection for Aluminum Wire ± 5%	0.2148	0.0085

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.



## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**0.315**

Approximate AWG\* Number  
\*American Wire Gauge

**28**

Approximate SWG Number

**30**

Cir Mils **154.00**

Sq Mils **120.95**

Sq MM **0.07799**

Sq Cm **0.0007799**

Sq Inches **0.000120890**

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	<b>0.3150</b>	<b>0.0124</b>
Nominal Coated Wire Diameter (Single Build)	<b>0.3490</b>	<b>0.0137</b>
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	<b>0.3947</b>	<b>0.0155</b>
Width of Slot for Machine Insertion	<b>0.3074</b>	<b>0.0121</b>
Length of Cut for Radius Cut	<b>1.3475</b>	<b>0.0531</b>
Depth of Cut for Radius Cut	<b>1.2641</b>	<b>0.0498</b>
Depth of Cut for Non-Radius Cut	<b>1.1220</b>	<b>0.0442</b>
Fusing Electrode Tip Diameter	<b>0.4891</b>	<b>0.0193</b>
Orient Blade Thickness for Machine Insertion	<b>0.2997</b>	<b>0.0118</b>
Stuffing Blade Thickness for Machine Insertion	<b>0.2766</b>	<b>0.0109</b>
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	<b>1.1070</b>	<b>0.0436</b>
Mimumun Tang Width	<b>0.3244</b>	<b>0.0128</b>
Minimum Tang Thickness	<b>0.3091</b>	<b>0.0122</b>
Minimum Tang Radius	<b>0.1977</b>	<b>0.0078</b>
Height of Tang Projection for Aluminum Wire ± 5%	<b>0.2258</b>	<b>0.0089</b>

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**0.355**

Approximate AWG\* Number  
\*American Wire Gauge

**27**

Approximate SWG Number

**28**

Cir Mils **195.00**

Sq Mils **153.15**

Sq MM **0.09876**

Sq Cm **0.0009876**

Sq Inches **0.000153075**

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	0.3550	0.0140
Nominal Coated Wire Diameter (Single Build)	0.3920	0.0154
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	0.4434	0.0175
Width of Slot for Machine Insertion	0.3474	0.0137
Length of Cut for Radius Cut	1.5135	0.0596
Depth of Cut for Radius Cut	1.4198	0.0559
Depth of Cut for Non-Radius Cut	1.2603	0.0496
Fusing Electrode Tip Diameter	0.5493	0.0216
Orient Blade Thickness for Machine Insertion	0.3387	0.0133
Stuffing Blade Thickness for Machine Insertion	0.3126	0.0123
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	1.2434	0.0490
Minimum Tang Width	0.3656	0.0144
Minimum Tang Thickness	0.3484	0.0137
Minimum Tang Radius	0.2221	0.0087
Height of Tang Projection for Aluminum Wire ± 5%	0.2544	0.0100

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**0.40**

Approximate AWG\* Number  
\*American Wire Gauge

**26**

Approximate SWG Number

**27**

Cir Mils	248.00
Sq Mils	194.78
Sq MM	0.12560
Sq Cm	0.0012560
Sq Inches	0.000194680

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	0.4000	0.0157
Nominal Coated Wire Diameter (Single Build)	0.4390	0.0173
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	0.4965	0.0195
Width of Slot for Machine Insertion	0.3924	0.0154
Length of Cut for Radius Cut	1.6950	0.0667
Depth of Cut for Radius Cut	1.5901	0.0626
Depth of Cut for Non-Radius Cut	1.4114	0.0556
Fusing Electrode Tip Diameter	0.6152	0.0242
Orient Blade Thickness for Machine Insertion	0.3826	0.0151
Stuffing Blade Thickness for Machine Insertion	0.3531	0.0139
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	1.3925	0.0548
Mimimun Tang Width	0.4120	0.0162
Minimum Tang Thickness	0.3925	0.0155
Minimum Tang Radius	0.2487	0.0098
Height of Tang Projection for Aluminum Wire ± 5%	0.2867	0.0113

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**0.425**

Approximate AWG\* Number  
\*American Wire Gauge

**26**

Approximate SWG Number

**27**

Cir Mils	280.00
Sq Mils	219.91
Sq MM	0.14181
Sq Cm	0.0014181
Sq Inches	0.000219800

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	0.4250	0.0167
Nominal Coated Wire Diameter (Single Build)	0.4660	0.0183
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	0.5270	0.0207
Width of Slot for Machine Insertion	0.4174	0.0164
Length of Cut for Radius Cut	1.7992	0.0708
Depth of Cut for Radius Cut	1.6878	0.0665
Depth of Cut for Non-Radius Cut	1.4982	0.0590
Fusing Electrode Tip Diameter	0.6530	0.0257
Orient Blade Thickness for Machine Insertion	0.4069	0.0160
Stuffing Blade Thickness for Machine Insertion	0.3756	0.0148
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	1.4781	0.0582
Minimum Tang Width	0.4377	0.0172
Minimum Tang Thickness	0.4171	0.0164
Minimum Tang Radius	0.2640	0.0104
Height of Tang Projection for Aluminum Wire ± 5%	0.3046	0.0120

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**0.450**

Approximate AWG\* Number  
\*American Wire Gauge

**25**

Approximate SWG Number

**26**

Cir Mils **314.00**

Sq Mils **246.62**

Sq MM **0.15903**

Sq Cm **0.0015903**

Sq Inches **0.000246490**

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	0.4500	0.0177
Nominal Coated Wire Diameter (Single Build)	0.4910	0.0193
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	0.5553	0.0219
Width of Slot for Machine Insertion	0.4424	0.0174
Length of Cut for Radius Cut	1.8957	0.0746
Depth of Cut for Radius Cut	1.7784	0.0700
Depth of Cut for Non-Radius Cut	1.5786	0.0621
Fusing Electrode Tip Diameter	0.6880	0.0271
Orient Blade Thickness for Machine Insertion	0.4313	0.0170
Stuffing Blade Thickness for Machine Insertion	0.3981	0.0157
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	1.5574	0.0613
Mimumun Tang Width	0.4635	0.0182
Minimum Tang Thickness	0.4416	0.0174
Minimum Tang Radius	0.2782	0.0110
Height of Tang Projection for Aluminum Wire ± 5%	0.3225	0.0127

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**0.50**

Approximate AWG\* Number  
\*American Wire Gauge

**24**

Approximate SWG Number

**25**

Cir Mils	388.00
Sq Mils	304.74
Sq MM	0.19650
Sq Cm	0.0019650
Sq Inches	0.000304580

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	0.5000	0.0197
Nominal Coated Wire Diameter (Single Build)	0.5440	0.0214
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	0.6153	0.0242
Width of Slot for Machine Insertion	0.4924	0.0194
Length of Cut for Radius Cut	2.1004	0.0827
Depth of Cut for Radius Cut	1.9704	0.0776
Depth of Cut for Non-Radius Cut	1.7490	0.0689
Fusing Electrode Tip Diameter	0.7623	0.0300
Orient Blade Thickness for Machine Insertion	0.4801	0.0189
Stuffing Blade Thickness for Machine Insertion	0.4431	0.0174
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	1.7256	0.0679
Mimumun Tang Width	0.5150	0.0203
Minimum Tang Thickness	0.4906	0.0193
Minimum Tang Radius	0.3082	0.0121
Height of Tang Projection for Aluminum Wire ± 5%	0.3583	0.0141

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

NON-Standard (IEC) Metric Size  
\*International Electrotechnical Commission

**0.55**

Approximate AWG\* Number  
\*American Wire Gauge

**24**

Approximate SWG Number

**25**

Cir Mils	468.86
Sq Mils	368.25
Sq MM	0.02376
Sq Cm	0.0002376
Sq Inches	0.000368440

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	0.5512	0.0217
Nominal Coated Wire Diameter (Single Build)	0.5893	0.0232
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	0.6665	0.0262
Width of Slot for Machine Insertion	0.5436	0.0214
Length of Cut for Radius Cut	2.2752	0.0896
Depth of Cut for Radius Cut	2.1344	0.0840
Depth of Cut for Non-Radius Cut	1.8945	0.0746
Fusing Electrode Tip Diameter	0.8258	0.0325
Orient Blade Thickness for Machine Insertion	0.5300	0.0209
Stuffing Blade Thickness for Machine Insertion	0.4892	0.0193
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	1.8692	0.0736
Mimumun Tang Width	0.5677	0.0224
Minimum Tang Thickness	0.5409	0.0213
Minimum Tang Radius	0.3339	0.0131
Height of Tang Projection for Aluminum Wire ± 5%	0.3950	0.0156

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**0.560**

Approximate AWG\* Number  
\*American Wire Gauge

**23**

Approximate SWG Number

**24**

Cir Mils **486.00**

Sq Mils **381.70**

Sq MM **0.24613**

Sq Cm **0.0024613**

Sq Inches **0.000381510**

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	0.5613	0.0221
Nominal Coated Wire Diameter (Single Build)	0.6060	0.0239
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	0.6854	0.0270
Width of Slot for Machine Insertion	0.5537	0.0218
Length of Cut for Radius Cut	2.3398	0.0921
Depth of Cut for Radius Cut	2.1949	0.0864
Depth of Cut for Non-Radius Cut	1.9483	0.0767
Fusing Electrode Tip Diameter	0.8492	0.0334
Orient Blade Thickness for Machine Insertion	0.5399	0.0213
Stuffing Blade Thickness for Machine Insertion	0.4983	0.0196
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	1.9222	0.0757
Mimumun Tang Width	0.5782	0.0228
Minimum Tang Thickness	0.5508	0.0217
Minimum Tang Radius	0.3434	0.0135
Height of Tang Projection for Aluminum Wire ± 5%	0.4023	0.0158

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.



## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**0.600**

Approximate AWG\* Number  
\*American Wire Gauge

**23**

Approximate SWG Number

**23**

Cir Mils **558.00**

Sq Mils **438.25**

Sq MM **0.28260**

Sq Cm **0.0028260**

Sq Inches **0.000438030**

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	0.6000	0.0236
Nominal Coated Wire Diameter (Single Build)	0.6490	0.0256
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	0.7340	0.0289
Width of Slot for Machine Insertion	0.5924	0.0233
Length of Cut for Radius Cut	2.5058	0.0987
Depth of Cut for Radius Cut	2.3507	0.0925
Depth of Cut for Non-Radius Cut	2.0865	0.0821
Fusing Electrode Tip Diameter	0.9094	0.0358
Orient Blade Thickness for Machine Insertion	0.5776	0.0227
Stuffing Blade Thickness for Machine Insertion	0.5331	0.0210
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	2.0586	0.0810
Minimum Tang Width	0.6180	0.0243
Minimum Tang Thickness	0.5888	0.0232
Minimum Tang Radius	0.3677	0.0145
Height of Tang Projection for Aluminum Wire ± 5%	0.4300	0.0169

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**0.630**

Approximate AWG\* Number  
\*American Wire Gauge

**22**

Approximate SWG Number

**23**

Cir Mils **615.00**

Sq Mils **483.02**

Sq MM **0.31147**

Sq Cm **0.0031147**

Sq Inches **0.000482775**

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	0.6300	0.0248
Nominal Coated Wire Diameter (Single Build)	0.6790	0.0267
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	0.7679	0.0302
Width of Slot for Machine Insertion	0.6224	0.0245
Length of Cut for Radius Cut	2.6216	0.1032
Depth of Cut for Radius Cut	2.4593	0.0968
Depth of Cut for Non-Radius Cut	2.1830	0.0859
Fusing Electrode Tip Diameter	0.9515	0.0375
Orient Blade Thickness for Machine Insertion	0.6068	0.0239
Stuffing Blade Thickness for Machine Insertion	0.5601	0.0221
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	2.1538	0.0848
Mimumun Tang Width	0.6489	0.0255
Minimum Tang Thickness	0.6182	0.0243
Minimum Tang Radius	0.3847	0.0151
Height of Tang Projection for Aluminum Wire ± 5%	0.4515	0.0178

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

NON-Standard (IEC) Metric Size  
\*International Electrotechnical Commission

**0.65**

Approximate AWG\* Number  
\*American Wire Gauge

**22**

Approximate SWG Number

**23**

Cir Mils	654.78
Sq Mils	514.26
Sq MM	0.33184
Sq Cm	0.0033184
Sq Inches	0.000514435

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	0.6502	0.0256
Nominal Coated Wire Diameter (Single Build)	0.7188	0.0283
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	0.8130	0.0320
Width of Slot for Machine Insertion	0.6426	0.0253
Length of Cut for Radius Cut	2.7754	0.1093
Depth of Cut for Radius Cut	2.6036	0.1025
Depth of Cut for Non-Radius Cut	2.3110	0.0910
Fusing Electrode Tip Diameter	1.0073	0.0397
Orient Blade Thickness for Machine Insertion	0.6266	0.0247
Stuffing Blade Thickness for Machine Insertion	0.5784	0.0228
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	2.2801	0.0898
Mimumun Tang Width	0.6697	0.0264
Minimum Tang Thickness	0.6381	0.0251
Minimum Tang Radius	0.4073	0.0160
Height of Tang Projection for Aluminum Wire ± 5%	0.4660	0.0183

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

NON-Standard (IEC) Metric Size  
\*International Electrotechnical Commission

**0.70**

Approximate AWG\* Number  
\*American Wire Gauge

**21**

Approximate SWG Number

**22**

Cir Mils	759.33
Sq Mils	596.38
Sq MM	0.38483
Sq Cm	0.0038483
Sq Inches	0.000596437

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	0.7010	0.0276
Nominal Coated Wire Diameter (Single Build)	0.7620	0.0300
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	0.8618	0.0339
Width of Slot for Machine Insertion	0.6934	0.0273
Length of Cut for Radius Cut	2.9421	0.1158
Depth of Cut for Radius Cut	2.7600	0.1087
Depth of Cut for Non-Radius Cut	2.4498	0.0965
Fusing Electrode Tip Diameter	1.0678	0.0420
Orient Blade Thickness for Machine Insertion	0.6761	0.0266
Stuffing Blade Thickness for Machine Insertion	0.6241	0.0246
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	2.4171	0.0952
Mimumun Tang Width	0.7221	0.0284
Minimum Tang Thickness	0.6879	0.0271
Minimum Tang Radius	0.4317	0.0170
Height of Tang Projection for Aluminum Wire ± 5%	0.5024	0.0198

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**0.710**

Approximate AWG\* Number  
\*American Wire Gauge

**21**

Approximate SWG Number

**22**

Cir Mils **781.00**

Sq Mils **613.40**

Sq MM **0.39554**

Sq Cm **0.0039554**

Sq Inches **0.000613085**

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	0.7100	0.0280
Nominal Coated Wire Diameter (Single Build)	0.8052	0.0317
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	0.9107	0.0359
Width of Slot for Machine Insertion	0.7024	0.0277
Length of Cut for Radius Cut	3.1088	0.1224
Depth of Cut for Radius Cut	2.9164	0.1148
Depth of Cut for Non-Radius Cut	2.5887	0.1019
Fusing Electrode Tip Diameter	1.1283	0.0444
Orient Blade Thickness for Machine Insertion	0.6848	0.0270
Stuffing Blade Thickness for Machine Insertion	0.6321	0.0249
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	2.5540	0.1006
Mimumun Tang Width	0.7313	0.0288
Minimum Tang Thickness	0.6967	0.0274
Minimum Tang Radius	0.4562	0.0180
Height of Tang Projection for Aluminum Wire ± 5%	0.5089	0.0200

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**0.750**

Approximate AWG\* Number  
\*American Wire Gauge

**21**

Approximate SWG Number

**22**

Cir Mils **872.00**

Sq Mils **684.87**

Sq MM **0.44162**

Sq Cm **0.0044162**

Sq Inches **0.000684520**

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	0.7500	0.0295
Nominal Coated Wire Diameter (Single Build)	0.8357	0.0329
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	0.9451	0.0372
Width of Slot for Machine Insertion	0.7424	0.0292
Length of Cut for Radius Cut	3.2265	0.1270
Depth of Cut for Radius Cut	3.0268	0.1192
Depth of Cut for Non-Radius Cut	2.6866	0.1058
Fusing Electrode Tip Diameter	1.1710	0.0461
Orient Blade Thickness for Machine Insertion	0.7238	0.0285
Stuffing Blade Thickness for Machine Insertion	0.6681	0.0263
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	2.6507	0.1044
Minimum Tang Width	0.7725	0.0304
Minimum Tang Thickness	0.7360	0.0290
Minimum Tang Radius	0.4735	0.0186
Height of Tang Projection for Aluminum Wire ± 5%	0.5375	0.0212

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**0.80**

Approximate AWG\* Number  
\*American Wire Gauge

**20**

Approximate SWG Number

**21**

Cir Mils	992.00
Sq Mils	779.12
Sq MM	0.50240
Sq Cm	0.0050240
Sq Inches	0.000778720

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	0.8000	0.0315
Nominal Coated Wire Diameter (Single Build)	0.8550	0.0337
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	0.9670	0.0381
Width of Slot for Machine Insertion	0.7924	0.0312
Length of Cut for Radius Cut	3.3011	0.1300
Depth of Cut for Radius Cut	3.0968	0.1219
Depth of Cut for Non-Radius Cut	2.7488	0.1082
Fusing Electrode Tip Diameter	1.1981	0.0472
Orient Blade Thickness for Machine Insertion	0.7726	0.0304
Stuffing Blade Thickness for Machine Insertion	0.7131	0.0281
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	2.7121	0.1068
Mimumun Tang Width	0.8240	0.0324
Minimum Tang Thickness	0.7850	0.0309
Minimum Tang Radius	0.4844	0.0191
Height of Tang Projection for Aluminum Wire ± 5%	0.5734	0.0226

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**0.850**

Approximate AWG\* Number  
\*American Wire Gauge

**20**

Approximate SWG Number

**21**

Cir Mils	1,120.00
Sq Mils	879.65
Sq MM	0.56722
Sq Cm	0.0056722
Sq Inches	0.000879200

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	0.8500	0.0335
Nominal Coated Wire Diameter (Single Build)	0.9090	0.0358
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	1.0281	0.0405
Width of Slot for Machine Insertion	0.8424	0.0332
Length of Cut for Radius Cut	3.5096	0.1382
Depth of Cut for Radius Cut	3.2924	0.1296
Depth of Cut for Non-Radius Cut	2.9224	0.1151
Fusing Electrode Tip Diameter	1.2738	0.0501
Orient Blade Thickness for Machine Insertion	0.8213	0.0323
Stuffing Blade Thickness for Machine Insertion	0.7581	0.0298
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	2.8833	0.1135
Minimum Tang Width	0.8755	0.0345
Minimum Tang Thickness	0.8341	0.0328
Minimum Tang Radius	0.5150	0.0203
Height of Tang Projection for Aluminum Wire ± 5%	0.6092	0.0240

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.



## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**0.90**

Approximate AWG\* Number  
\*American Wire Gauge

**19**

Approximate SWG Number

**20**

Cir Mils	1,260.00
Sq Mils	989.60
Sq MM	0.63813
Sq Cm	0.0063813
Sq Inches	0.000989100

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	0.9000	0.0354
Nominal Coated Wire Diameter (Single Build)	0.9591	0.0378
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	1.0847	0.0427
Width of Slot for Machine Insertion	0.8924	0.0351
Length of Cut for Radius Cut	3.7031	0.1458
Depth of Cut for Radius Cut	3.4739	0.1368
Depth of Cut for Non-Radius Cut	3.0835	0.1214
Fusing Electrode Tip Diameter	1.3440	0.0529
Orient Blade Thickness for Machine Insertion	0.8701	0.0343
Stuffing Blade Thickness for Machine Insertion	0.8031	0.0316
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	3.0423	0.1198
Mimumun Tang Width	0.9270	0.0365
Minimum Tang Thickness	0.8832	0.0348
Minimum Tang Radius	0.5434	0.0214
Height of Tang Projection for Aluminum Wire ± 5%	0.6450	0.0254

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**0.950**

Approximate AWG\* Number  
\*American Wire Gauge

**19**

Approximate SWG Number

**20**

Cir Mils	1,400.00
Sq Mils	1,099.56
Sq MM	0.70903
Sq Cm	0.0070903
Sq Inches	0.001099000

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	0.9500	0.0374
Nominal Coated Wire Diameter (Single Build)	1.0120	0.0398
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	1.1446	0.0451
Width of Slot for Machine Insertion	0.9424	0.0371
Length of Cut for Radius Cut	3.9073	0.1538
Depth of Cut for Radius Cut	3.6655	0.1443
Depth of Cut for Non-Radius Cut	3.2536	0.1281
Fusing Electrode Tip Diameter	1.4181	0.0558
Orient Blade Thickness for Machine Insertion	0.9188	0.0362
Stuffing Blade Thickness for Machine Insertion	0.8481	0.0334
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	3.2101	0.1264
Minimum Tang Width	0.9785	0.0385
Minimum Tang Thickness	0.9322	0.0367
Minimum Tang Radius	0.5734	0.0226
Height of Tang Projection for Aluminum Wire ± 5%	0.6809	0.0268

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**1.0**

Approximate AWG\* Number  
\*American Wire Gauge

**18**

Approximate SWG Number

**20**

Cir Mils	1,550.00
Sq Mils	1,217.37
Sq MM	0.78500
Sq Cm	0.0078500
Sq Inches	0.001399263

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	1.0000	0.0394
Nominal Coated Wire Diameter (Single Build)	1.0620	0.0418
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	1.2011	0.0473
Width of Slot for Machine Insertion	0.9924	0.0391
Length of Cut for Radius Cut	4.1004	0.1614
Depth of Cut for Radius Cut	3.8466	0.1514
Depth of Cut for Non-Radius Cut	3.4143	0.1344
Fusing Electrode Tip Diameter	1.4882	0.0586
Orient Blade Thickness for Machine Insertion	0.9676	0.0381
Stuffing Blade Thickness for Machine Insertion	0.8931	0.0352
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	3.3687	0.1326
Mimumun Tang Width	1.0300	0.0406
Minimum Tang Thickness	0.9813	0.0386
Minimum Tang Radius	0.6017	0.0237
Height of Tang Projection for Aluminum Wire ± 5%	0.7167	0.0282

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**1.060**

Approximate AWG\* Number  
\*American Wire Gauge

**18**

Approximate SWG Number

**19**

Cir Mils	1,740.00
Sq Mils	1,366.60
Sq MM	0.88122
Sq Cm	0.0088122
Sq Inches	0.001365900

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	1.0600	0.0417
Nominal Coated Wire Diameter (Single Build)	1.1240	0.0443
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	1.2712	0.0500
Width of Slot for Machine Insertion	1.0524	0.0414
Length of Cut for Radius Cut	4.3398	0.1709
Depth of Cut for Radius Cut	4.0711	0.1603
Depth of Cut for Non-Radius Cut	3.6137	0.1423
Fusing Electrode Tip Diameter	1.5751	0.0620
Orient Blade Thickness for Machine Insertion	1.0261	0.0404
Stuffing Blade Thickness for Machine Insertion	0.9471	0.0373
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	3.5653	0.1404
Minimum Tang Width	1.0918	0.0430
Minimum Tang Thickness	1.0402	0.0410
Minimum Tang Radius	0.6369	0.0251
Height of Tang Projection for Aluminum Wire ± 5%	0.7597	0.0299

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

NON-Standard (IEC) Metric Size  
\*International Electrotechnical Commission

**1.10**

Approximate AWG\* Number  
\*American Wire Gauge

**17**

Approximate SWG Number

**19**

Cir Mils	1,875.18
Sq Mils	1,472.76
Sq MM	0.95034
Sq Cm	0.0095034
Sq Inches	0.001473000

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	1.0998	0.0433
Nominal Coated Wire Diameter (Single Build)	1.1481	0.0452
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	1.2985	0.0511
Width of Slot for Machine Insertion	1.0922	0.0430
Length of Cut for Radius Cut	4.4327	0.1745
Depth of Cut for Radius Cut	4.1583	0.1637
Depth of Cut for Non-Radius Cut	3.6911	0.1453
Fusing Electrode Tip Diameter	1.6088	0.0633
Orient Blade Thickness for Machine Insertion	1.0649	0.0419
Stuffing Blade Thickness for Machine Insertion	0.9830	0.0387
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	3.6417	0.1434
Mimumun Tang Width	1.1328	0.0446
Minimum Tang Thickness	1.0793	0.0425
Minimum Tang Radius	0.6505	0.0256
Height of Tang Projection for Aluminum Wire ± 5%	0.7882	0.0310

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**1.120**

Approximate AWG\* Number  
\*American Wire Gauge

**17**

Approximate SWG Number

**19**

Cir Mils	1,940.00
Sq Mils	1,523.68
Sq MM	0.98251
Sq Cm	0.0098251
Sq Inches	0.001522900

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	1.1200	0.0441
Nominal Coated Wire Diameter (Single Build)	1.1840	0.0466
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	1.3391	0.0527
Width of Slot for Machine Insertion	1.1124	0.0438
Length of Cut for Radius Cut	4.5714	0.1800
Depth of Cut for Radius Cut	4.2884	0.1688
Depth of Cut for Non-Radius Cut	3.8066	0.1499
Fusing Electrode Tip Diameter	1.6591	0.0653
Orient Blade Thickness for Machine Insertion	1.0846	0.0427
Stuffing Blade Thickness for Machine Insertion	1.0011	0.0394
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	3.7556	0.1479
Minimum Tang Width	1.1536	0.0454
Minimum Tang Thickness	1.0991	0.0433
Minimum Tang Radius	0.6709	0.0264
Height of Tang Projection for Aluminum Wire ± 5%	0.8027	0.0316

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

NON-Standard (IEC) Metric Size  
\*International Electrotechnical Commission

**1.15**

Approximate AWG\* Number  
\*American Wire Gauge

**17**

Approximate SWG Number

**18**

Cir Mils	1,782.50
Sq Mils	1,399.98
Sq MM	0.90275
Sq Cm	0.0090275
Sq Inches	0.002052000

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	1.1500	0.0453
Nominal Coated Wire Diameter (Single Build)	1.2395	0.0488
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	1.4019	0.0552
Width of Slot for Machine Insertion	1.1424	0.0450
Length of Cut for Radius Cut	4.7858	0.1884
Depth of Cut for Radius Cut	4.4895	0.1768
Depth of Cut for Non-Radius Cut	3.9851	0.1569
Fusing Electrode Tip Diameter	1.7370	0.0684
Orient Blade Thickness for Machine Insertion	1.1138	0.0439
Stuffing Blade Thickness for Machine Insertion	1.0281	0.0405
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	3.9318	0.1548
Mimumun Tang Width	1.1845	0.0466
Minimum Tang Thickness	1.1285	0.0444
Minimum Tang Radius	0.7023	0.0277
Height of Tang Projection for Aluminum Wire ± 5%	0.8242	0.0324

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**1.180**

Approximate AWG\* Number  
\*American Wire Gauge

**17**

Approximate SWG Number

**18**

Cir Mils	2,160.00
Sq Mils	1,696.46
Sq MM	1.09393
Sq Cm	0.0109393
Sq Inches	0.001695600

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	1.1800	0.0465
Nominal Coated Wire Diameter (Single Build)	1.2395	0.0488
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	1.4019	0.0552
Width of Slot for Machine Insertion	1.1724	0.0462
Length of Cut for Radius Cut	4.7858	0.1884
Depth of Cut for Radius Cut	4.4895	0.1768
Depth of Cut for Non-Radius Cut	3.9851	0.1569
Fusing Electrode Tip Diameter	1.7370	0.0684
Orient Blade Thickness for Machine Insertion	1.1431	0.0450
Stuffing Blade Thickness for Machine Insertion	1.0551	0.0415
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	3.9318	0.1548
Mimumun Tang Width	1.2154	0.0479
Minimum Tang Thickness	1.1579	0.0456
Minimum Tang Radius	0.7023	0.0277
Height of Tang Projection for Aluminum Wire ± 5%	0.8457	0.0333

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.



## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

NON-Standard (IEC) Metric Size  
\*International Electrotechnical Commission

**1.20**

Approximate AWG\* Number  
\*American Wire Gauge

**17**

Approximate SWG Number

**18**

Cir Mils	2,231.49
Sq Mils	1,752.61
Sq MM	1.13092
Sq Cm	0.0113092
Sq Inches	0.001753000

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	1.1989	0.0472
Nominal Coated Wire Diameter (Single Build)	1.2471	0.0491
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	1.4105	0.0555
Width of Slot for Machine Insertion	1.1913	0.0469
Length of Cut for Radius Cut	4.8152	0.1896
Depth of Cut for Radius Cut	4.5171	0.1778
Depth of Cut for Non-Radius Cut	4.0096	0.1579
Fusing Electrode Tip Diameter	1.7476	0.0688
Orient Blade Thickness for Machine Insertion	1.1615	0.0457
Stuffing Blade Thickness for Machine Insertion	1.0721	0.0422
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	3.9559	0.1557
Mimumun Tang Width	1.2348	0.0486
Minimum Tang Thickness	1.1765	0.0463
Minimum Tang Radius	0.7066	0.0278
Height of Tang Projection for Aluminum Wire ± 5%	0.8592	0.0338

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**1.250**

Approximate AWG\* Number  
\*American Wire Gauge

**16**

Approximate SWG Number

**18**

Cir Mils	2,420.00
Sq Mils	1,900.67
Sq MM	1.22561
Sq Cm	0.0122561
Sq Inches	0.001899700

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	1.2500	0.0492
Nominal Coated Wire Diameter (Single Build)	1.3160	0.0518
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	1.4884	0.0586
Width of Slot for Machine Insertion	1.2424	0.0489
Length of Cut for Radius Cut	5.0811	0.2000
Depth of Cut for Radius Cut	4.7665	0.1877
Depth of Cut for Non-Radius Cut	4.2309	0.1666
Fusing Electrode Tip Diameter	1.8441	0.0726
Orient Blade Thickness for Machine Insertion	1.2113	0.0477
Stuffing Blade Thickness for Machine Insertion	1.1181	0.0440
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	4.1743	0.1643
Mimumun Tang Width	1.2875	0.0507
Minimum Tang Thickness	1.2266	0.0483
Minimum Tang Radius	0.7456	0.0294
Height of Tang Projection for Aluminum Wire ± 5%	0.8959	0.0353

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

NON-Standard (IEC) Metric Size  
\*International Electrotechnical Commission

**1.30**

Approximate AWG\* Number  
\*American Wire Gauge

**16**

Approximate SWG Number

**18**

Cir Mils	2,619.57
Sq Mils	2,057.41
Sq MM	1.32760
Sq Cm	0.0132760
Sq Inches	0.002058000

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	1.3005	0.0512
Nominal Coated Wire Diameter (Single Build)	1.3721	0.0540
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	1.5518	0.0611
Width of Slot for Machine Insertion	1.2929	0.0509
Length of Cut for Radius Cut	5.2977	0.2086
Depth of Cut for Radius Cut	4.9697	0.1957
Depth of Cut for Non-Radius Cut	4.4113	0.1737
Fusing Electrode Tip Diameter	1.9227	0.0757
Orient Blade Thickness for Machine Insertion	1.2605	0.0496
Stuffing Blade Thickness for Machine Insertion	1.1636	0.0458
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	4.3523	0.1714
Mimumun Tang Width	1.3395	0.0527
Minimum Tang Thickness	1.2762	0.0502
Minimum Tang Radius	0.7774	0.0306
Height of Tang Projection for Aluminum Wire ± 5%	0.9321	0.0367

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**1.320**

Approximate AWG\* Number  
\*American Wire Gauge

**16**

Approximate SWG Number

**17**

Cir Mils	2,700.00
Sq Mils	2,120.58
Sq MM	1.36742
Sq Cm	0.0136742
Sq Inches	0.002119500

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	1.3200	0.0520
Nominal Coated Wire Diameter (Single Build)	1.3880	0.0546
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	1.5698	0.0618
Width of Slot for Machine Insertion	1.3124	0.0517
Length of Cut for Radius Cut	5.3591	0.2110
Depth of Cut for Radius Cut	5.0273	0.1979
Depth of Cut for Non-Radius Cut	4.4624	0.1757
Fusing Electrode Tip Diameter	1.9450	0.0766
Orient Blade Thickness for Machine Insertion	1.2796	0.0504
Stuffing Blade Thickness for Machine Insertion	1.1811	0.0465
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	4.4027	0.1733
Mimumun Tang Width	1.3596	0.0535
Minimum Tang Thickness	1.2953	0.0510
Minimum Tang Radius	0.7864	0.0310
Height of Tang Projection for Aluminum Wire ± 5%	0.9460	0.0372

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**1.40**

Approximate AWG\* Number  
\*American Wire Gauge

**15**

Approximate SWG Number

**17**

Cir Mils	3,040.00
Sq Mils	2,387.62
Sq MM	1.53961
Sq Cm	0.0153961
Sq Inches	0.002386400

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	1.4000	0.0551
Nominal Coated Wire Diameter (Single Build)	1.4680	0.0578
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	1.6603	0.0654
Width of Slot for Machine Insertion	1.3924	0.0548
Length of Cut for Radius Cut	5.6679	0.2231
Depth of Cut for Radius Cut	5.3171	0.2093
Depth of Cut for Non-Radius Cut	4.7196	0.1858
Fusing Electrode Tip Diameter	2.0571	0.0810
Orient Blade Thickness for Machine Insertion	1.3576	0.0534
Stuffing Blade Thickness for Machine Insertion	1.2531	0.0493
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	4.6565	0.1833
Mimumun Tang Width	1.4420	0.0568
Minimum Tang Thickness	1.3738	0.0541
Minimum Tang Radius	0.8318	0.0327
Height of Tang Projection for Aluminum Wire ± 5%	1.0034	0.0395

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**1.50**

Approximate AWG\* Number  
\*American Wire Gauge

**15**

Approximate SWG Number

**17**

Cir Mils	3,490.00
Sq Mils	2,741.05
Sq MM	1.76751
Sq Cm	0.0176751
Sq Inches	0.002739650

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	1.5000	0.0591
Nominal Coated Wire Diameter (Single Build)	1.5700	0.0618
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	1.7757	0.0699
Width of Slot for Machine Insertion	1.4924	0.0588
Length of Cut for Radius Cut	6.0618	0.2387
Depth of Cut for Radius Cut	5.6865	0.2239
Depth of Cut for Non-Radius Cut	5.0475	0.1987
Fusing Electrode Tip Diameter	2.2001	0.0866
Orient Blade Thickness for Machine Insertion	1.4551	0.0573
Stuffing Blade Thickness for Machine Insertion	1.3431	0.0529
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	4.9800	0.1961
Mimumun Tang Width	1.5450	0.0608
Minimum Tang Thickness	1.4719	0.0580
Minimum Tang Radius	0.8896	0.0350
Height of Tang Projection for Aluminum Wire ± 5%	1.0750	0.0423

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**1.60**

Approximate AWG\* Number  
\*American Wire Gauge

**14**

Approximate SWG Number

**16**

Cir Mils **3,970.00**

Sq Mils **3,118.04**

Sq MM **2.01061**

Sq Cm **0.0201061**

Sq Inches **0.003116450**

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	1.6000	0.0630
Nominal Coated Wire Diameter (Single Build)	1.6700	0.0657
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	1.8888	0.0744
Width of Slot for Machine Insertion	1.5924	0.0627
Length of Cut for Radius Cut	6.4479	0.2539
Depth of Cut for Radius Cut	6.0487	0.2381
Depth of Cut for Non-Radius Cut	5.3690	0.2114
Fusing Electrode Tip Diameter	2.3402	0.0921
Orient Blade Thickness for Machine Insertion	1.5526	0.0611
Stuffing Blade Thickness for Machine Insertion	1.4331	0.0564
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	5.2972	0.2086
Mimumun Tang Width	1.6480	0.0649
Minimum Tang Thickness	1.5701	0.0618
Minimum Tang Radius	0.9462	0.0373
Height of Tang Projection for Aluminum Wire ± 5%	1.1467	0.0451

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**1.70**

Approximate AWG\* Number  
\*American Wire Gauge

**14**

Approximate SWG Number

**16**

Cir Mils	4,480.00
Sq Mils	3,518.59
Sq MM	2.26890
Sq Cm	0.0226890
Sq Inches	0.003516800

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	1.7000	0.0669
Nominal Coated Wire Diameter (Single Build)	1.7720	0.0698
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	2.0041	0.0789
Width of Slot for Machine Insertion	1.6924	0.0666
Length of Cut for Radius Cut	6.8417	0.2694
Depth of Cut for Radius Cut	6.4182	0.2527
Depth of Cut for Non-Radius Cut	5.6970	0.2243
Fusing Electrode Tip Diameter	2.4831	0.0978
Orient Blade Thickness for Machine Insertion	1.6501	0.0650
Stuffing Blade Thickness for Machine Insertion	1.5231	0.0600
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	5.6208	0.2213
Mimumun Tang Width	1.7510	0.0689
Minimum Tang Thickness	1.6682	0.0657
Minimum Tang Radius	1.0040	0.0395
Height of Tang Projection for Aluminum Wire ± 5%	1.2184	0.0480

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.



## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**1.80**

Approximate AWG\* Number  
\*American Wire Gauge

**13**

Approximate SWG Number

**15**

Cir Mils **5,020.00**

Sq Mils **3,942.71**

Sq MM **2.54238**

Sq Cm **0.0254238**

Sq Inches **0.003940700**

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	1.8000	0.0709
Nominal Coated Wire Diameter (Single Build)	1.8720	0.0737
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	2.1172	0.0834
Width of Slot for Machine Insertion	1.7924	0.0706
Length of Cut for Radius Cut	7.2278	0.2846
Depth of Cut for Radius Cut	6.7804	0.2669
Depth of Cut for Non-Radius Cut	6.0185	0.2369
Fusing Electrode Tip Diameter	2.6232	0.1033
Orient Blade Thickness for Machine Insertion	1.7476	0.0688
Stuffing Blade Thickness for Machine Insertion	1.6131	0.0635
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	5.9380	0.2338
Minimum Tang Width	1.8540	0.0730
Minimum Tang Thickness	1.7663	0.0695
Minimum Tang Radius	1.0607	0.0418
Height of Tang Projection for Aluminum Wire ± 5%	1.2901	0.0508

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**1.90**

Approximate AWG\* Number  
\*American Wire Gauge

**13**

Approximate SWG Number

**15**

Cir Mils	5,600.00
Sq Mils	4,398.24
Sq MM	2.83612
Sq Cm	0.0283612
Sq Inches	0.004396000

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	1.9000	0.0748
Nominal Coated Wire Diameter (Single Build)	1.9740	0.0777
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	2.2326	0.0879
Width of Slot for Machine Insertion	1.8924	0.0745
Length of Cut for Radius Cut	7.6216	0.3001
Depth of Cut for Radius Cut	7.1498	0.2815
Depth of Cut for Non-Radius Cut	6.3464	0.2499
Fusing Electrode Tip Diameter	2.7662	0.1089
Orient Blade Thickness for Machine Insertion	1.8451	0.0726
Stuffing Blade Thickness for Machine Insertion	1.7031	0.0671
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	6.2615	0.2465
Minimum Tang Width	1.9570	0.0770
Minimum Tang Thickness	1.8645	0.0734
Minimum Tang Radius	1.1185	0.0440
Height of Tang Projection for Aluminum Wire ± 5%	1.3617	0.0536

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**2.0**

Approximate AWG\* Number  
\*American Wire Gauge

**12**

Approximate SWG Number

**14**

Cir Mils	6,200.00
Sq Mils	4,869.48
Sq MM	3.13999
Sq Cm	0.0313999
Sq Inches	0.004867000

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	2.0000	0.0787
Nominal Coated Wire Diameter (Single Build)	2.0740	0.0817
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	2.3457	0.0923
Width of Slot for Machine Insertion	1.9924	0.0784
Length of Cut for Radius Cut	8.0077	0.3153
Depth of Cut for Radius Cut	7.5120	0.2957
Depth of Cut for Non-Radius Cut	6.6679	0.2625
Fusing Electrode Tip Diameter	2.9063	0.1144
Orient Blade Thickness for Machine Insertion	1.9426	0.0765
Stuffing Blade Thickness for Machine Insertion	1.7931	0.0706
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	6.5787	0.2590
Minimum Tang Width	2.0600	0.0811
Minimum Tang Thickness	1.9626	0.0773
Minimum Tang Radius	1.1751	0.0463
Height of Tang Projection for Aluminum Wire ± 5%	1.4334	0.0564

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**2.120**

Approximate AWG\* Number  
\*American Wire Gauge

**12**

Approximate SWG Number

**14**

Cir Mils	6,970.00
Sq Mils	5,474.24
Sq MM	3.52996
Sq Cm	0.0352996
Sq Inches	0.005471450

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	2.1200	0.0835
Nominal Coated Wire Diameter (Single Build)	2.1960	0.0865
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	2.4837	0.0978
Width of Slot for Machine Insertion	2.1124	0.0832
Length of Cut for Radius Cut	8.4787	0.3338
Depth of Cut for Radius Cut	7.9539	0.3131
Depth of Cut for Non-Radius Cut	7.0601	0.2780
Fusing Electrode Tip Diameter	3.0773	0.1212
Orient Blade Thickness for Machine Insertion	2.0596	0.0811
Stuffing Blade Thickness for Machine Insertion	1.9011	0.0748
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	6.9657	0.2742
Minimum Tang Width	2.1836	0.0860
Minimum Tang Thickness	2.0804	0.0819
Minimum Tang Radius	1.2443	0.0490
Height of Tang Projection for Aluminum Wire ± 5%	1.5194	0.0598

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**2.240**

Approximate AWG\* Number  
\*American Wire Gauge

**11**

Approximate SWG Number

**13**

Cir Mils	7,780.00
Sq Mils	6,110.41
Sq MM	3.94019
Sq Cm	0.0394019
Sq Inches	0.006107300

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	2.2400	0.0882
Nominal Coated Wire Diameter (Single Build)	2.3160	0.0912
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	2.6194	0.1031
Width of Slot for Machine Insertion	2.2324	0.0879
Length of Cut for Radius Cut	8.9421	0.3520
Depth of Cut for Radius Cut	8.3885	0.3303
Depth of Cut for Non-Radius Cut	7.4459	0.2931
Fusing Electrode Tip Diameter	3.2454	0.1278
Orient Blade Thickness for Machine Insertion	2.1766	0.0857
Stuffing Blade Thickness for Machine Insertion	2.0091	0.0791
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	7.3463	0.2892
Mimumun Tang Width	2.3072	0.0908
Minimum Tang Thickness	2.1981	0.0865
Minimum Tang Radius	1.3122	0.0517
Height of Tang Projection for Aluminum Wire ± 5%	1.6054	0.0632

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**2.360**

Approximate AWG\* Number  
\*American Wire Gauge

**11**

Approximate SWG Number

**12**

Cir Mils **8,630.00**

Sq Mils **6,778.00**

Sq MM **4.37067**

Sq Cm **0.0437067**

Sq Inches **0.006774550**

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	<b>2.3600</b>	<b>0.0929</b>
Nominal Coated Wire Diameter (Single Build)	<b>2.4380</b>	<b>0.0960</b>
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	<b>2.7574</b>	<b>0.1086</b>
Width of Slot for Machine Insertion	<b>2.3524</b>	<b>0.0926</b>
Length of Cut for Radius Cut	<b>9.4131</b>	<b>0.3706</b>
Depth of Cut for Radius Cut	<b>8.8304</b>	<b>0.3477</b>
Depth of Cut for Non-Radius Cut	<b>7.8382</b>	<b>0.3086</b>
Fusing Electrode Tip Diameter	<b>3.4164</b>	<b>0.1345</b>
Orient Blade Thickness for Machine Insertion	<b>2.2936</b>	<b>0.0903</b>
Stuffing Blade Thickness for Machine Insertion	<b>2.1171</b>	<b>0.0834</b>
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	<b>7.7333</b>	<b>0.3045</b>
Minimum Tang Width	<b>2.4308</b>	<b>0.0957</b>
Minimum Tang Thickness	<b>2.3159</b>	<b>0.0912</b>
Minimum Tang Radius	<b>1.3814</b>	<b>0.0544</b>
Height of Tang Projection for Aluminum Wire ± 5%	<b>1.6914</b>	<b>0.0666</b>

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**2.50**

Approximate AWG\* Number  
\*American Wire Gauge

**10**

Approximate SWG Number

**12**

Cir Mils	9,690.00
Sq Mils	7,610.53
Sq MM	4.90751
Sq Cm	0.0490751
Sq Inches	0.007606650

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	2.5000	0.0984
Nominal Coated Wire Diameter (Single Build)	2.5780	0.1015
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	2.9157	0.1148
Width of Slot for Machine Insertion	2.4924	0.0981
Length of Cut for Radius Cut	9.9536	0.3919
Depth of Cut for Radius Cut	9.3375	0.3676
Depth of Cut for Non-Radius Cut	8.2883	0.3263
Fusing Electrode Tip Diameter	3.6126	0.1422
Orient Blade Thickness for Machine Insertion	2.4301	0.0957
Stuffing Blade Thickness for Machine Insertion	2.2431	0.0883
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	8.1774	0.3219
Minimum Tang Width	2.5750	0.1014
Minimum Tang Thickness	2.4532	0.0966
Minimum Tang Radius	1.4607	0.0575
Height of Tang Projection for Aluminum Wire ± 5%	1.7917	0.0705

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**2.650**

Approximate AWG\* Number  
\*American Wire Gauge

**10**

Approximate SWG Number

**11**

Cir Mils **10,880.00**

Sq Mils **8,545.15**

Sq MM **5.51018**

Sq Cm **0.0551018**

Sq Inches **0.008540800**

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	<b>2.6500</b>	<b>0.1043</b>
Nominal Coated Wire Diameter (Single Build)	<b>2.7300</b>	<b>0.1075</b>
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	<b>3.0876</b>	<b>0.1216</b>
Width of Slot for Machine Insertion	<b>2.6424</b>	<b>0.1040</b>
Length of Cut for Radius Cut	<b>10.5405</b>	<b>0.4150</b>
Depth of Cut for Radius Cut	<b>9.8880</b>	<b>0.3893</b>
Depth of Cut for Non-Radius Cut	<b>8.7769</b>	<b>0.3455</b>
Fusing Electrode Tip Diameter	<b>3.8256</b>	<b>0.1506</b>
Orient Blade Thickness for Machine Insertion	<b>2.5763</b>	<b>0.1014</b>
Stuffing Blade Thickness for Machine Insertion	<b>2.3781</b>	<b>0.0936</b>
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	<b>8.6595</b>	<b>0.3409</b>
Mimumun Tang Width	<b>2.7295</b>	<b>0.1075</b>
Minimum Tang Thickness	<b>2.6004</b>	<b>0.1024</b>
Minimum Tang Radius	<b>1.5468</b>	<b>0.0609</b>
Height of Tang Projection for Aluminum Wire ± 5%	<b>1.8993</b>	<b>0.0748</b>

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.



## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**2.80**

Approximate AWG\* Number  
\*American Wire Gauge

**9**

Approximate SWG Number

**11**

Cir Mils	12,150.00
Sq Mils	9,542.61
Sq MM	6.15337
Sq Cm	0.0615337
Sq Inches	0.009537750

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	2.8000	0.1102
Nominal Coated Wire Diameter (Single Build)	2.8800	0.1134
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	3.2573	0.1282
Width of Slot for Machine Insertion	2.7924	0.1099
Length of Cut for Radius Cut	11.1197	0.4378
Depth of Cut for Radius Cut	10.4313	0.4107
Depth of Cut for Non-Radius Cut	9.2592	0.3645
Fusing Electrode Tip Diameter	4.0358	0.1589
Orient Blade Thickness for Machine Insertion	2.7226	0.1072
Stuffing Blade Thickness for Machine Insertion	2.5131	0.0989
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	9.1353	0.3597
Minimum Tang Width	2.8840	0.1135
Minimum Tang Thickness	2.7476	0.1082
Minimum Tang Radius	1.6318	0.0642
Height of Tang Projection for Aluminum Wire ± 5%	2.0068	0.0790

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC* Standard Metric Size <small>*International Electrotechnical Commission</small>	<b>3.0</b>	Cir Mils	13,950.00
Approximate AWG* Number <small>*American Wire Gauge</small>	<b>9</b>	Sq Mils	10,956.33
Approximate SWG Number	<b>10</b>	Sq MM	7.06499
		Sq Cm	0.0706499
		Sq Inches	0.010950750

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	3.0000	0.1181
Nominal Coated Wire Diameter (Single Build)	3.0830	0.1214
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	3.4869	0.1373
Width of Slot for Machine Insertion	2.9924	0.1178
Length of Cut for Radius Cut	11.9034	0.4686
Depth of Cut for Radius Cut	11.1666	0.4396
Depth of Cut for Non-Radius Cut	9.9118	0.3902
Fusing Electrode Tip Diameter	4.3202	0.1701
Orient Blade Thickness for Machine Insertion	2.9176	0.1149
Stuffing Blade Thickness for Machine Insertion	2.6931	0.1060
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	9.7793	0.3850
Minimum Tang Width	3.0900	0.1217
Minimum Tang Thickness	2.9439	0.1159
Minimum Tang Radius	1.7468	0.0688
Height of Tang Projection for Aluminum Wire ± 5%	2.1501	0.0846

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**3.150**

Approximate AWG\* Number  
\*American Wire Gauge

**8**

Approximate SWG Number

**10**

Cir Mils **15,380.00**

Sq Mils **12,079.45**

Sq MM **7.78921**

Sq Cm **0.0778921**

Sq Inches **0.012073300**

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	<b>3.1500</b>	<b>0.1240</b>
Nominal Coated Wire Diameter (Single Build)	<b>3.2330</b>	<b>0.1273</b>
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	<b>3.6565</b>	<b>0.1440</b>
Width of Slot for Machine Insertion	<b>3.1424</b>	<b>0.1237</b>
Length of Cut for Radius Cut	<b>12.4826</b>	<b>0.4914</b>
Depth of Cut for Radius Cut	<b>11.7099</b>	<b>0.4610</b>
Depth of Cut for Non-Radius Cut	<b>10.3941</b>	<b>0.4092</b>
Fusing Electrode Tip Diameter	<b>4.5304</b>	<b>0.1784</b>
Orient Blade Thickness for Machine Insertion	<b>3.0638</b>	<b>0.1206</b>
Stuffing Blade Thickness for Machine Insertion	<b>2.8281</b>	<b>0.1113</b>
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	<b>10.2551</b>	<b>0.4037</b>
Mimumun Tang Width	<b>3.2445</b>	<b>0.1277</b>
Minimum Tang Thickness	<b>3.0911</b>	<b>0.1217</b>
Minimum Tang Radius	<b>1.8318</b>	<b>0.0721</b>
Height of Tang Projection for Aluminum Wire ± 5%	<b>2.2576</b>	<b>0.0889</b>

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.

## FUSING CHART FOR COMMUTATOR SLOT AND TANG TERMINAL DIMENSIONS

IEC\* Standard Metric Size  
\*International Electrotechnical Commission

**3.350**

Approximate AWG\* Number  
\*American Wire Gauge

**8**

Approximate SWG Number

**9**

Cir Mils **17,390.00**

Sq Mils **13,658.11**

Sq MM **8.80718**

Sq Cm **0.0880718**

Sq Inches **0.013651150**

# Metric System

	Millimeters	Inches
Nominal Bare Diameter	<b>3.3500</b>	<b>0.1319</b>
Nominal Coated Wire Diameter (Single Build)	<b>3.4350</b>	<b>0.1352</b>
<b>Commutator Slot Dimensions</b>		
The saw diameter for which this chart was calculated is 22 MM (7/8 Inch or 0.875 Inch)		
Width of Slot for Manual Insertion	<b>3.8850</b>	<b>0.1530</b>
Width of Slot for Machine Insertion	<b>3.3424</b>	<b>0.1316</b>
Length of Cut for Radius Cut	<b>13.2625</b>	<b>0.5221</b>
Depth of Cut for Radius Cut	<b>12.4415</b>	<b>0.4898</b>
Depth of Cut for Non-Radius Cut	<b>11.0435</b>	<b>0.4348</b>
Fusing Electrode Tip Diameter	<b>4.8135</b>	<b>0.1895</b>
Orient Blade Thickness for Machine Insertion	<b>3.2588</b>	<b>0.1283</b>
Stuffing Blade Thickness for Machine Insertion	<b>3.0081</b>	<b>0.1184</b>
<b>Tang Terminal Dimensions</b>		
Minimum Tang Length from the Tang's End to the Start of the Tang's Radius	<b>10.8958</b>	<b>0.4290</b>
Mimumun Tang Width	<b>3.4505</b>	<b>0.1358</b>
Minimum Tang Thickness	<b>3.2873</b>	<b>0.1294</b>
Minimum Tang Radius	<b>1.9463</b>	<b>0.0766</b>
Height of Tang Projection for Aluminum Wire ± 5%	<b>2.4009</b>	<b>0.0945</b>

The dimensions are usable only to three (3) decimal places for inch measurements and two (2) decimal places for metric measurements.