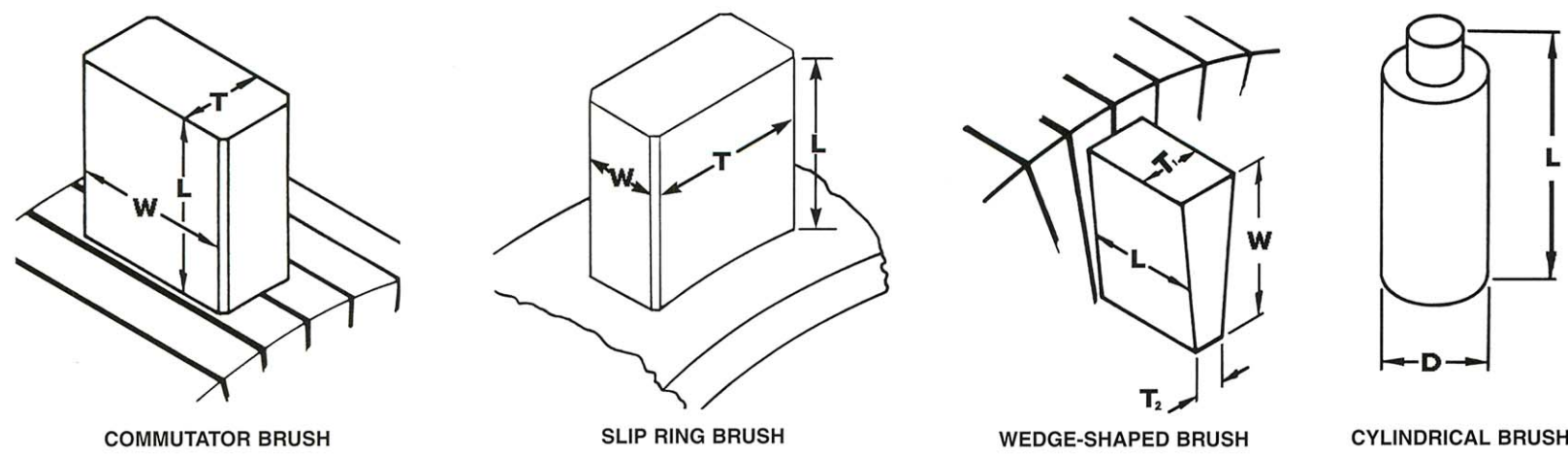


HELWIG CARBON[®]

PRODUCTS, INC.

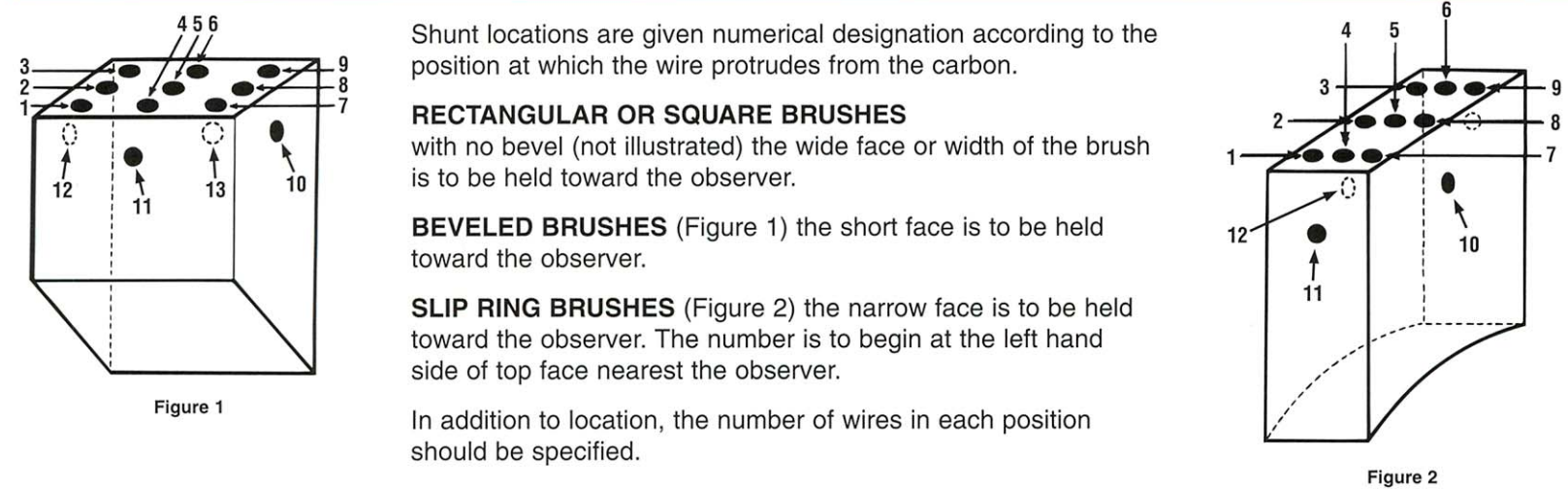
ISO 9001 Certified

Carbon Dimension

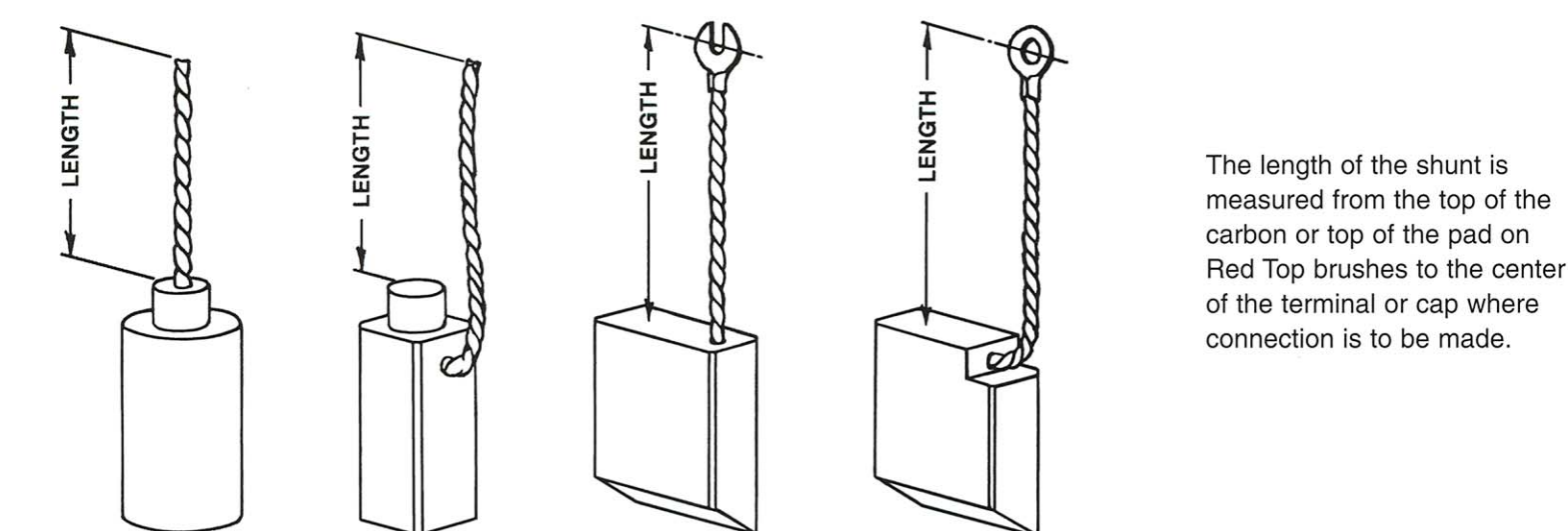


Brush sizes are designated as: **THICKNESS x WIDTH x LENGTH** of the carbon. If the brush design includes a Red Top, the length measurement should include the pad. On brushes with bevels, the length is measured on the long side. When specifying dimensions, submit information on brush length even if it is worn length, as a reference.

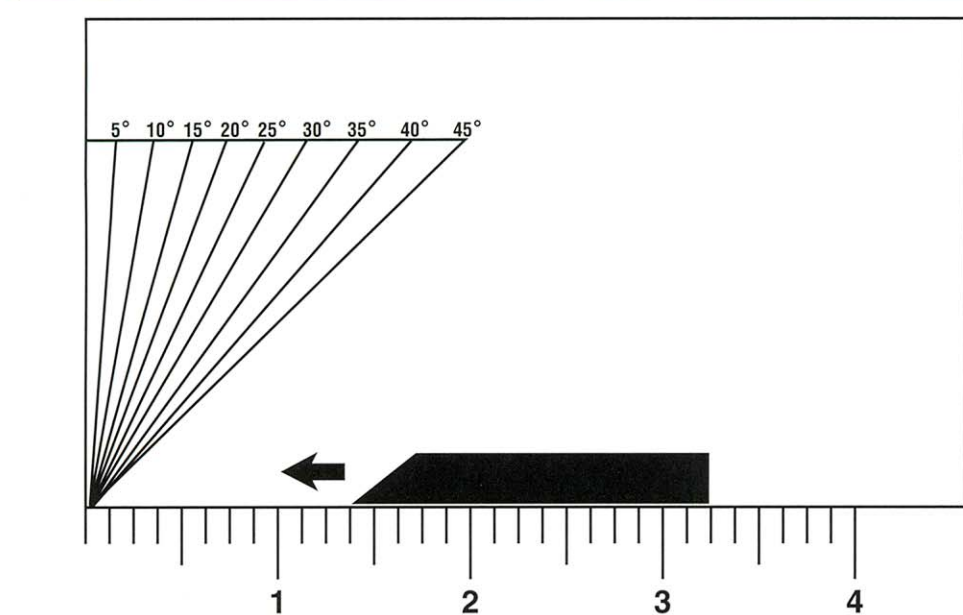
Shunt Locations



Shunt Length

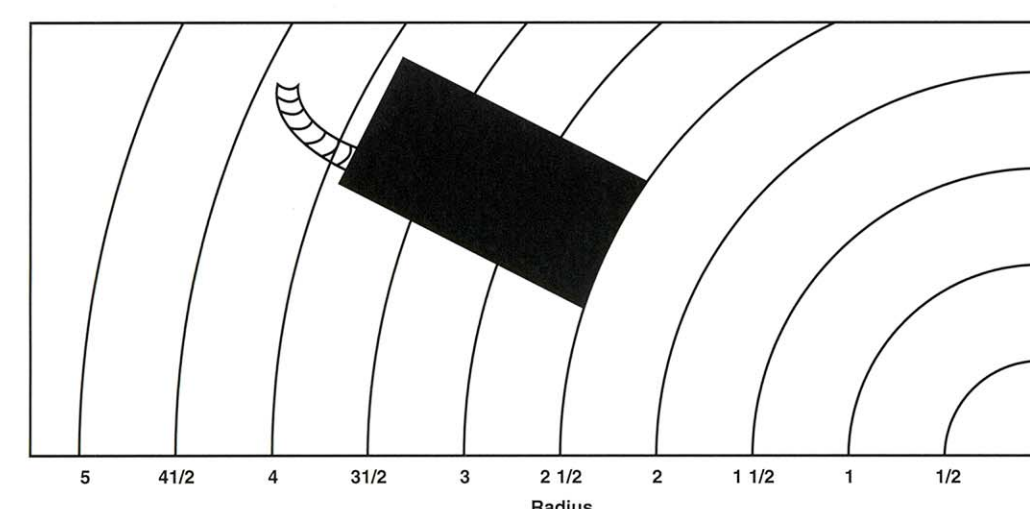


Bevels & Concave



Brushes are frequently supplied with top and/or bottom bevels in order to provide a more stable reaction of a brush within the holder. Production tolerance on a bevel is plus or minus one degree (+/- 1.0 degree).

A concave is a pre-machined radius on the wearing surface to reduce time required to seat a new brush to the commutator or ring surface.



CONCAVING
Specify diameter of commutator or ring surface. The brushes can then be supplied with the proper radius to maximize the contact surface of a new brush and minimize seating time.

Equivalents

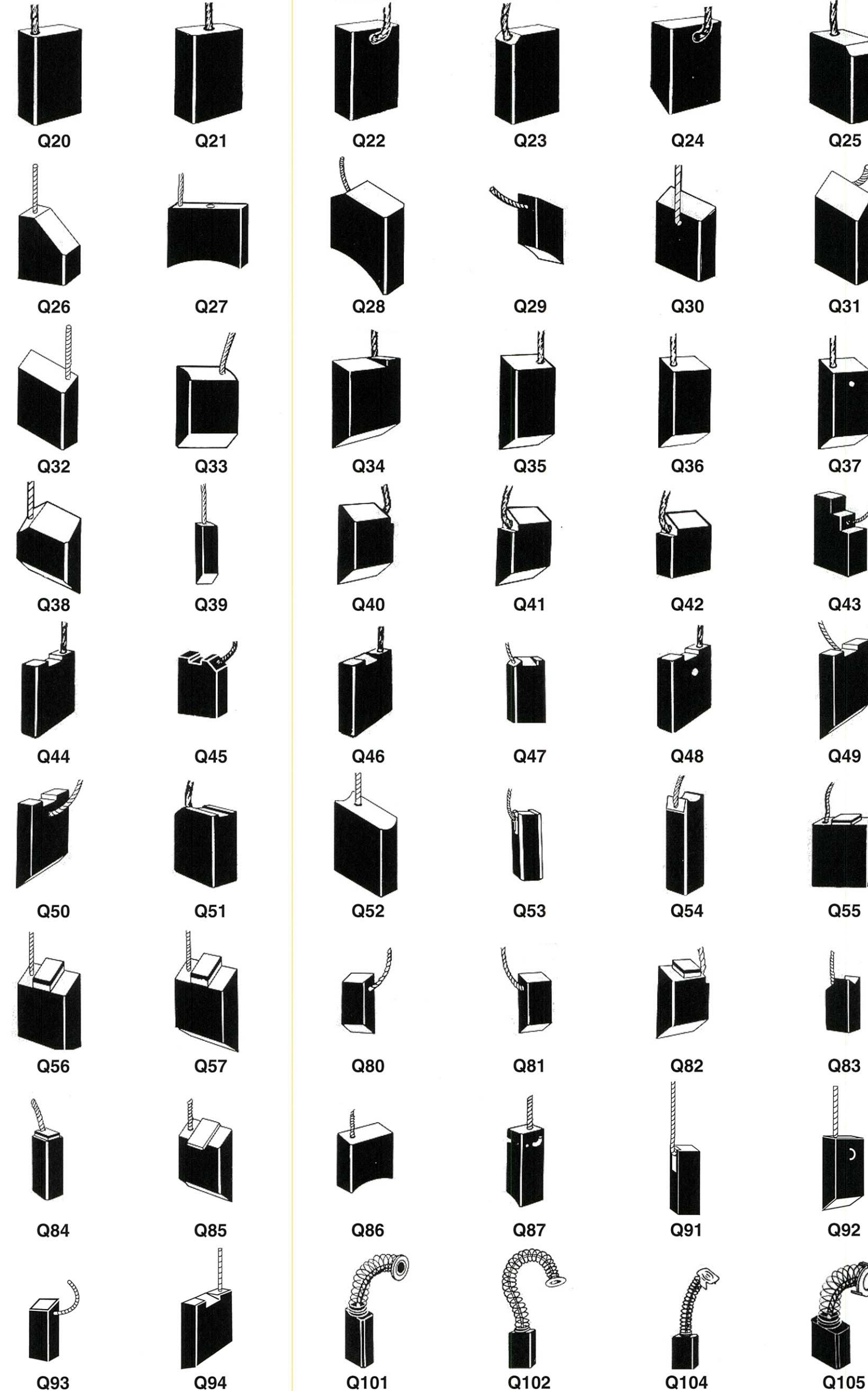
Decimal

1/16	— .0625
1/8	— .125
3/16	— .1875
1/4	— .25
5/16	— .3125
3/8	— .375
7/16	— .4375
1/2	— .5
9/16	— .5625
5/8	— .625
11/16	— .6875
3/4	— .75
13/16	— .8125
7/8	— .875
15/16	— .9375
1	— 1.000

Metric

1	— .0394
4	— .157
8	— .315
10	— .394
12	— .472
12.5	— .492
16	— .630
20	— .787
25	— .984
32	— 1.260
40	— 1.575

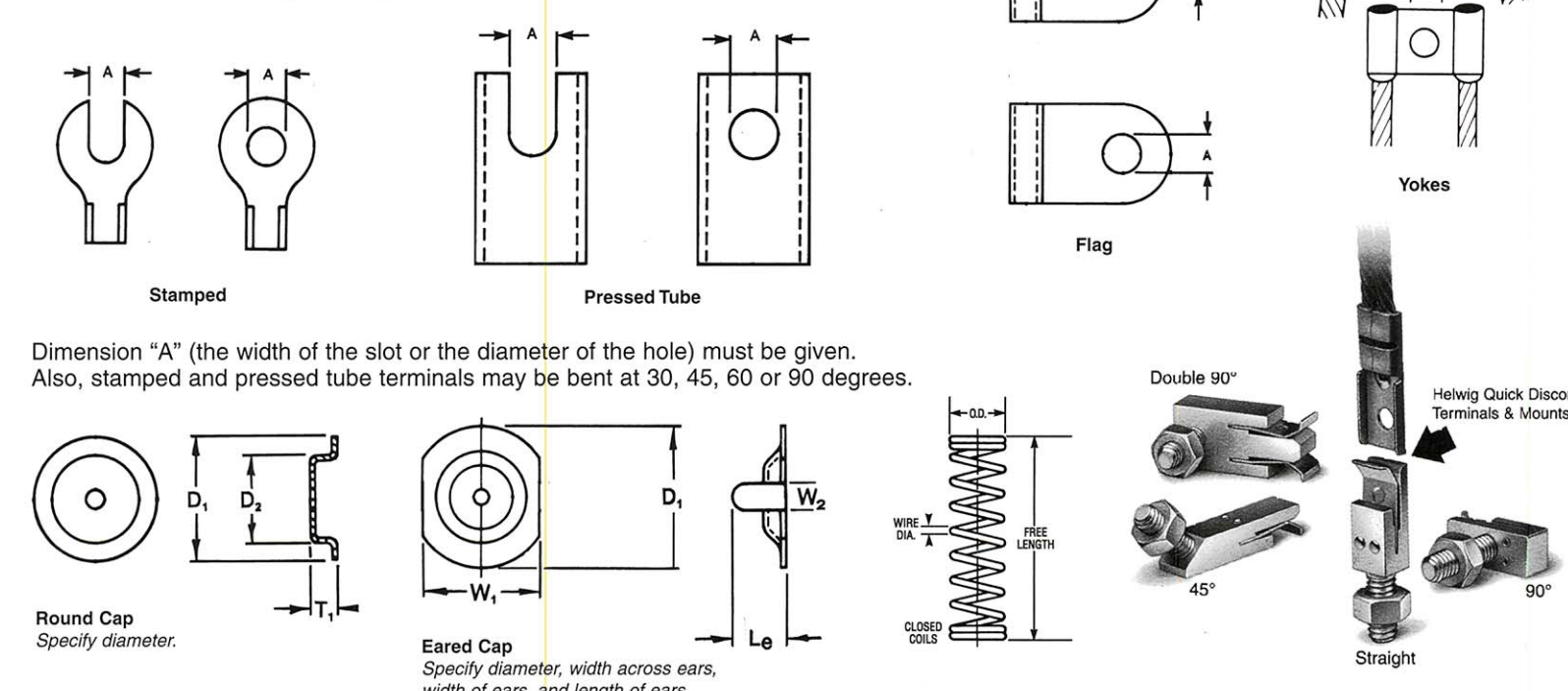
Tamped Single Shunt



Terminals and Caps

There is an ever increasing variety of caps and terminals used on brushes. Some of the most common are shown below.

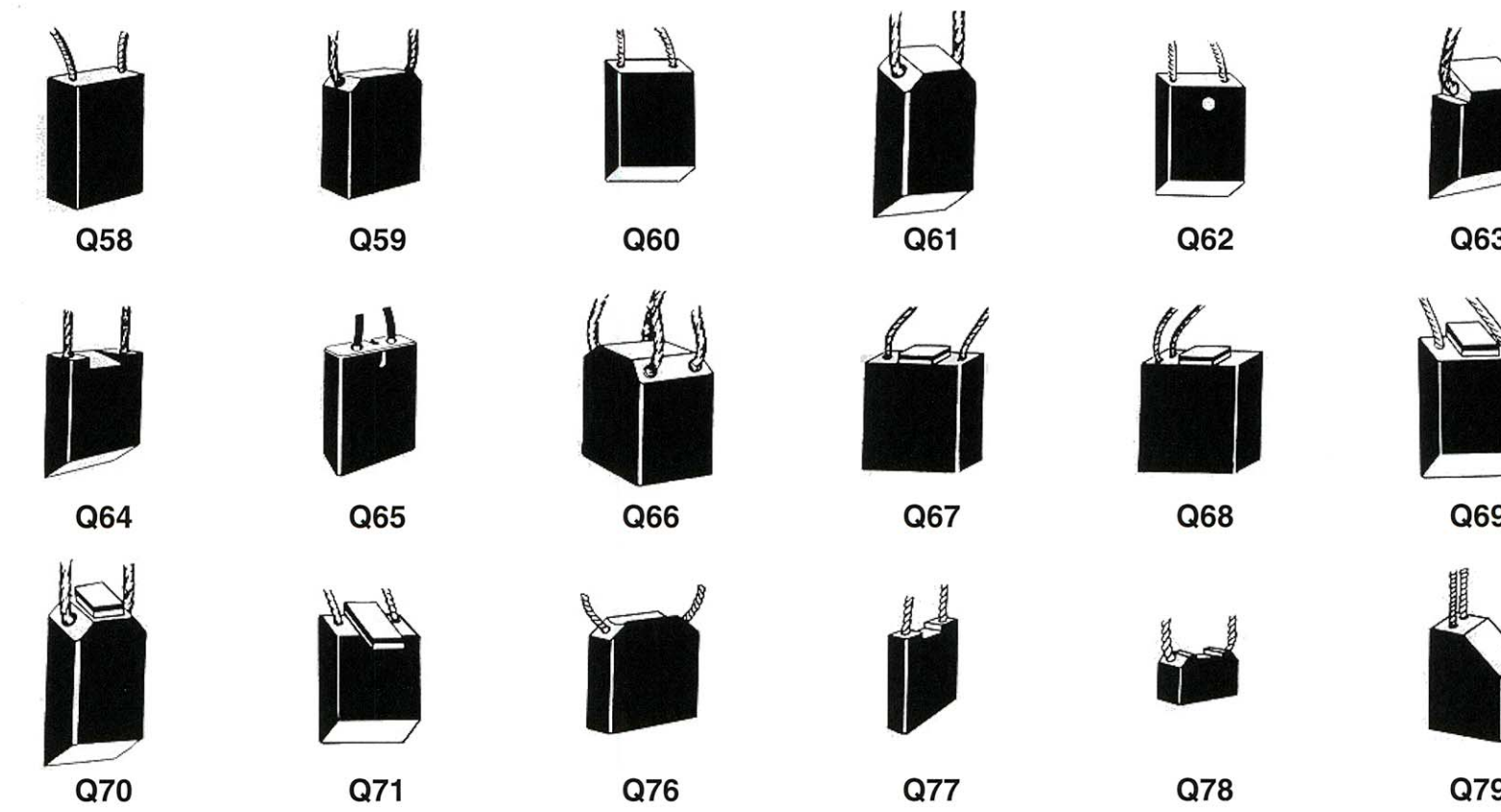
In order to determine terminals an caps not shown here; it is recommended that a detailed drawing or sample be submitted to assure correct fit.



Terminal Openings (x 1/32 inches) ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮ ⑯ ⑰ ⑱ ⑲ ⑳ ㉑ ㉒ ㉓ ㉔ ㉕ ㉖ ㉗ ㉘ ㉙ ㉚ ㉛ ㉜ ㉝ ㉞ ㉟ ㊱ ㊲ ㊳ ㊴ ㊵ ㊶ ㊷ ㊸ ㊹ ㊺ ㊻ ㊼ ㊽ ㊾ ㊿

Motor, Generator & Slip Ring Brushes

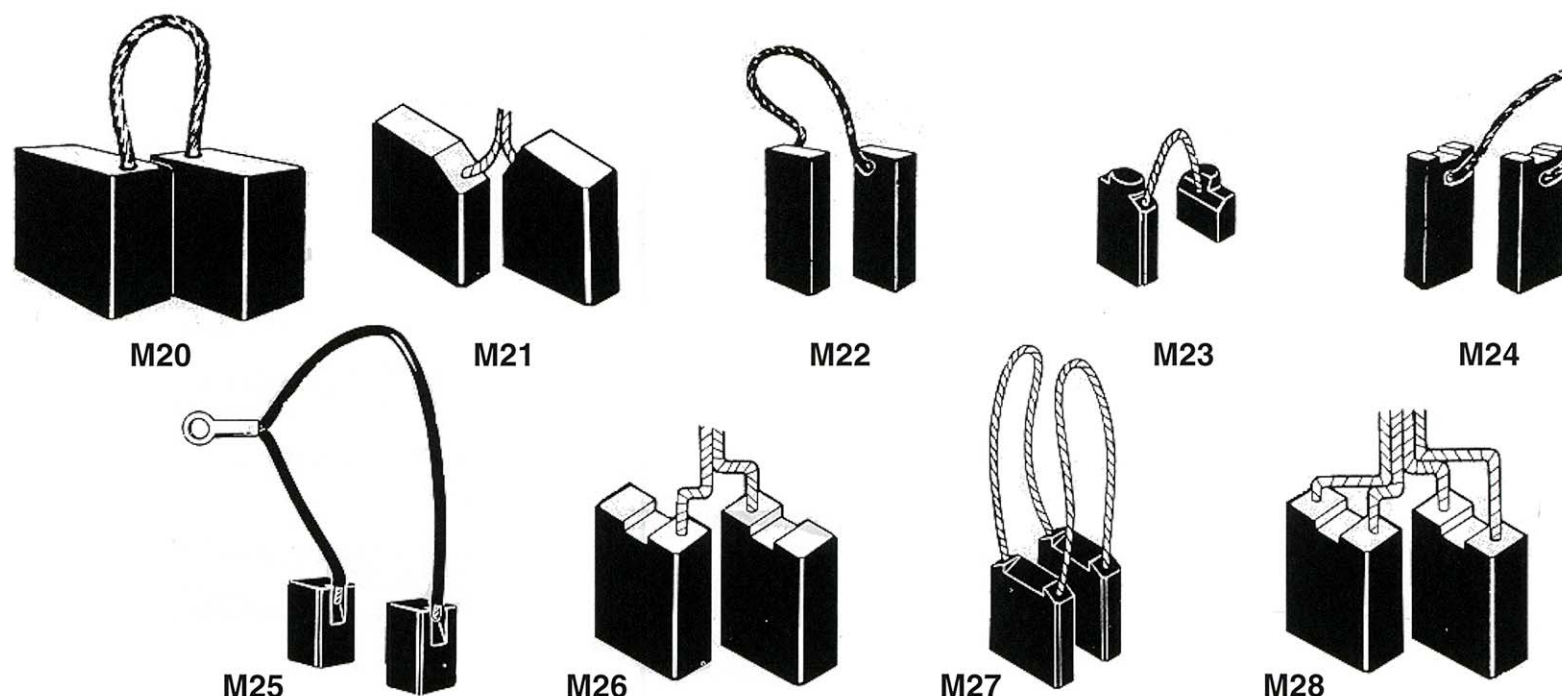
Tamped Multiple Shunt



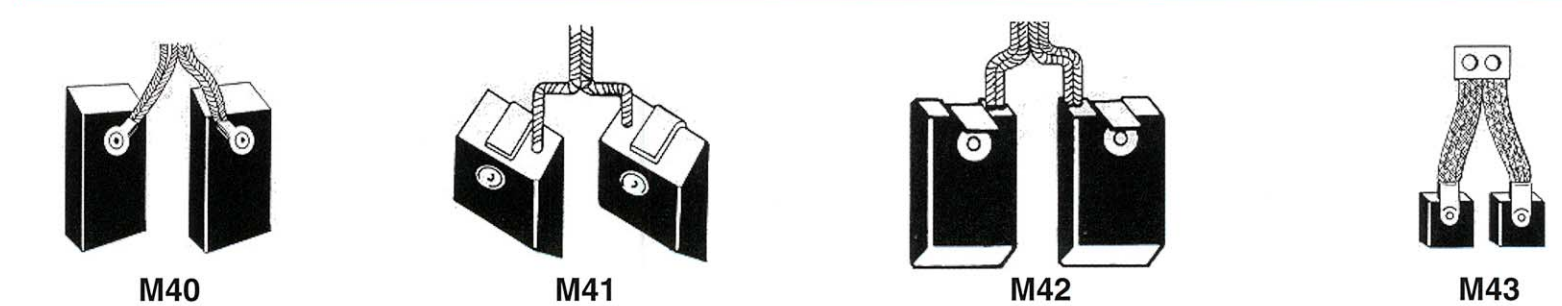
Tamped Multi-Section



Tamped Paired Brushes



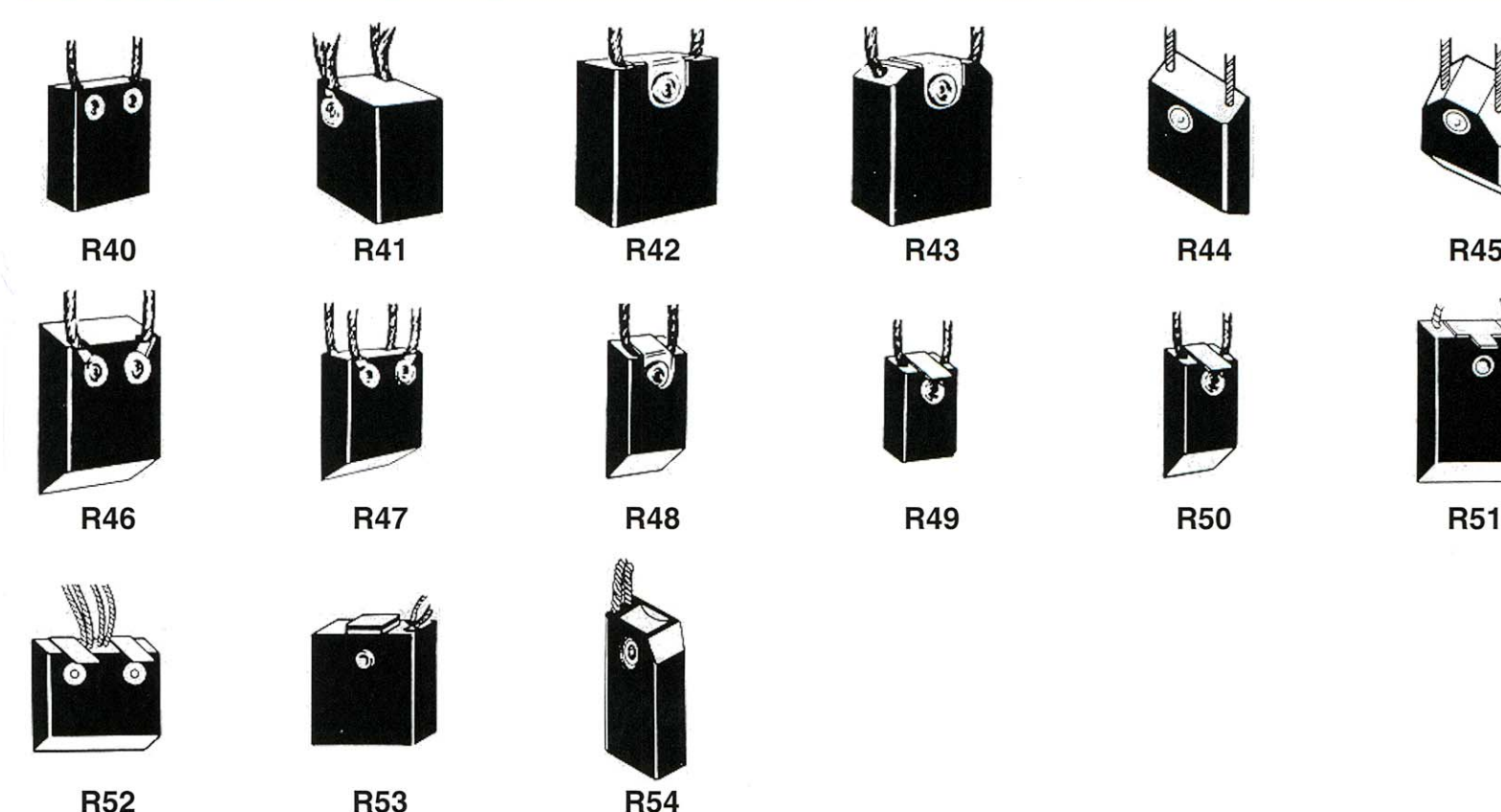
Riveted Paired Brushes



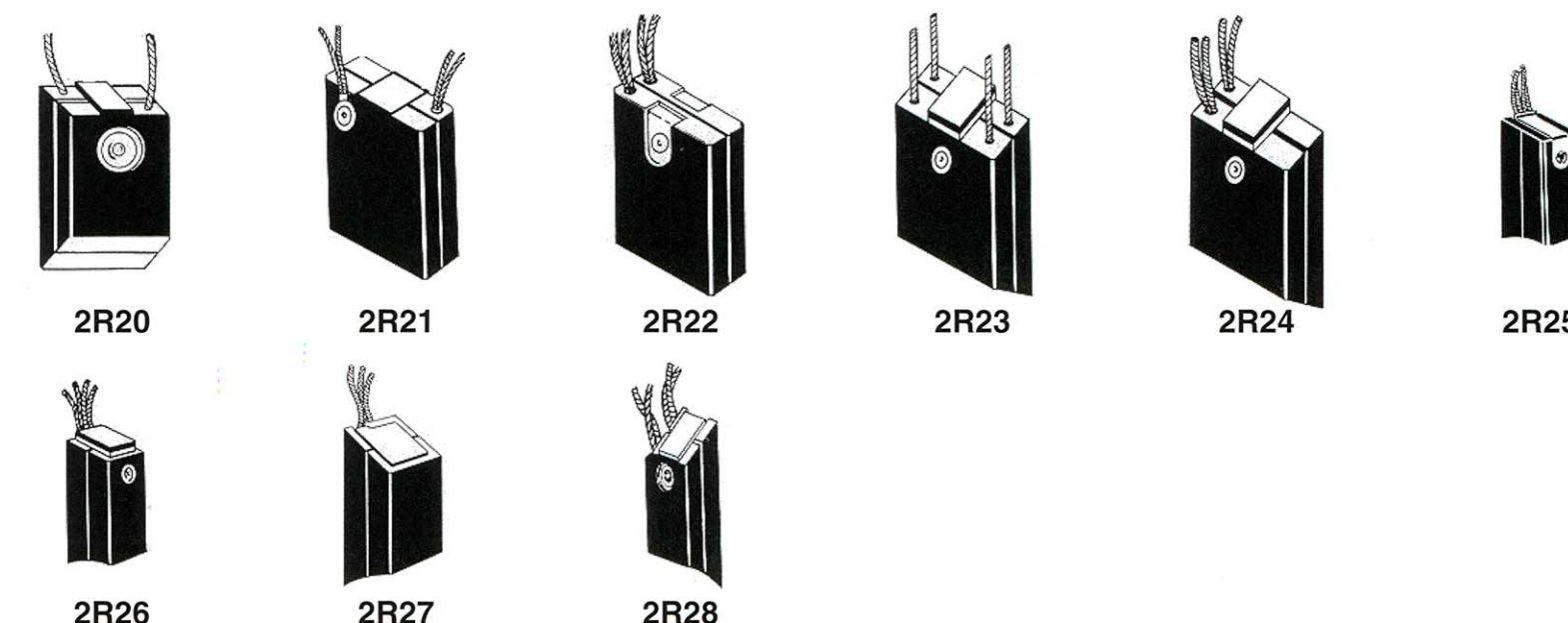
Riveted Single Shunt



Riveted Multiple Shunt Position



Riveted Multi-Section



Order Information

Please supply the following information to assist with brush identification:

- Brush markings or part #
- Size: Thickness, width, length
- Illustration #
- Terminal: type & size
- Shunt: Location, length, tinned, or insulated?
- Bevels: top & bottom

See our on-line catalog at www.helwigcarbon.com

Easy search capability by Part Number, Manufacturer, Size, Industry or Application

Phone 1-800-962-4851

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Email: info@helwigcarbon.com

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