



ESD Handbook TR20.20 Table 1 lists under Typical Static Electricity Sources "Brushes (camel/pig hair and synthetic bristles)." "It should be understood that any object, item, material or person could be a source of static electricity in the work environment. Removal of unnecessary nonconductors, replacing nonconductive materials with dissipative or conductive materials and grounding all conductors are the principle methods of controlling static electricity in the workplace, regardless of the activity." (TR 20.20 section 2.4)

### Characteristics:

- Brushes minimize static charge generation and remove electrostatic charges to ground when held by grounded personnel
- Dissipative polypropylene black handles are able to remove charges to ground
- Volume Resistance of conductive fibers:  $1 \times 10^3$  to  $< 1 \times 10^5$  ohms per ANSI/ESD STM11.12
- Volume Resistance of dissipative handle:  $1 \times 10^4$  to  $< 1 \times 10^{11}$  ohms per ANSI/ESD STM11.12
- Two kinds of bristles - semi fine, firm
- Semi-fine bristles are ideal for chemical and electronics applications
- Firm bristles are mainly for electronics, especially circuit boards



Firm bristles are made of conductive yarn, pig hair and horse hair

Semi-fine bristles are made of conductive yarn and horse hair

Generally speaking, once the conductive yarn is added to the bristles, it neutralizes the possibility of static build up caused by the natural hair.

Synthetic bristles can easily become charged with static in standard humidity conditions. Natural hair usually builds static in areas of low humidity, but due to the conductive fibers in our brushes, this problem does not take effect.

Item	Style	Bristle Hardness	Bristle Dimensions
35690	Round	Firm	1/4" diameter (6 mm), 0.59" H (6 mm)
35691	Long Handle	Firm	1" L (25 mm) x 0.79" H (20 mm) x 0.59" W (15 mm)
35692	Long Handle	Firm	2" L (50 mm) x 0.79" H (20 mm) x 0.59" W (15 mm)
35693	Flat	Firm	2" L (50 mm) x 1" H (6 mm) x 0.55" W (14 mm)
35694	Flat	Semi-Fine	0.5" L (13 mm) x .75" H (19 mm) x 0.4" W (10 mm)
35695	Curved Handle	Firm	3" L (76 mm) x 0.79" H (20 mm) x 1.5" W (38 mm)

Unless otherwise noted, tolerance is  $\pm 10\%$ .

Specifications and procedures subject to change without notice.

### CONDUCTIVE BRUSHES

**MENDA TOOLS**

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**DRAWING  
 NUMBER**  
 35690

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