

A-A-2516
April 1, 1987

COMMERCIAL ITEM DESCRIPTION

BRUSHES, WIRE, ROTARY,
WHEEL, CRIMPED WIRE

The General Services Administration has authorized the use of this commercial item description in preference to Type III, Class 1, Styles A and B of Federal Specification H-B-771.

This commercial item description covers brushes for use with pneumatic or electric tools in the removal of rust, scale, paint, or burrs from all types of metal surfaces.

Salient characteristics:

- Design:** Wheel-shape design for use with stationary or portable power tools. Wire securely attached to the wire-retaining components in a manner that permits the driving torque to be transmitted from the arbor to the brush periphery and that resists the functional forces produced by impact or centrifugal force.
- Styles:** A - narrow face width, designed to be used individually or ganged on a common arbor.
B - wide face width, provided with a standard 2-inch opening (except when brush diameter is less than 4 inches) and with a pair of interchangeable adapter plates with the arbor hole diameter specified in the table (when less than 2 inches).
- Wire material:** High carbon tempered steel, high carbon untempered steel, corrosion-resisting steel, or brass.
- Wire form:** Crimped (with at least four single amplitude, three dimensional crimps to the inch) or straight, as specified in the table.
- Marking:** Marked with the Maximum Safe Free Speed (or optionally, MSFS or Maximum RPM), the country of origin, the words "Wear Eye Protection", and the name of the manufacturer or a trademark of such known character that the source of manufacture may be readily determined. Marked speed may be higher than speed listed in table.
- Workmanship:** The brushes shall be well-constructed with a balanced distribution of wire fill. There shall be no evidence of rust, loose wire, or other defect which may impair serviceability, durability, or appearance.
- Standards compliance:** The brushes shall comply with American National Standards Institute (ANSI) Standard B165.1, Safety Requirements for the Design, Care and Use of Power Driven Brushing Tools.

National Stock Number	Style	Outside	Wire	Arbor	Wire	Wire	Number of Wire Points (min.)	Material	Max. Safe Free Speed (rpm)
		Brush Diameter (Inches)	Diameter (Inch)	Hole Diameter (Inches)	Trim Length (min.) (Inches)	Trim Length (max.) (Inches)			
5130-00-880-3545	A	1	0.0060	1/4	3/16	5/16	2520	HTS	8000
5130-01-054-5079	A	1	0.0060	1/4	3/16	5/16	2520	CRS	20000
5130-00-542-3207	A	1-3/8	0.0060	1/4	5/16	7/16	3450	HTS	20000
5130-00-880-3546	A	1-1/2	0.0060	3/8	5/16	7/16	3780	CRS	8000
5130-00-293-2720	A	1-1/2	0.0140	3/8	5/16	7/16	1000	HTS	8000
5130-01-029-5708	A	2	0.0025	1/2	7/16	9/16	16500	HUS	20000

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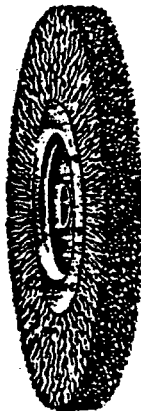
National Stock Number	Style	Outside Braid Diameter (Inches)	Wire Diameter (Inch)	Arbor Hole Diameter (Inches)	Wire Trim Length (min.) (Inches)	Wire Trim Length (max.) (Inches)	Number of Wire Points (min.)	Material	Max. Safe Free Speed (rpm)
5130-00-279-0702	A	2	0.0060	1/2	7/16	9/16	6000	HTS	8000
5130-00-455-5420	A	2	0.0060	1/2	7/16	9/16	6000	CRS	8000
5130-00-293-1992	A	2	0.0118	1/2	7/16	9/16	3300	HTS	8000
5130-00-262-7359	A	2	0.0140	1/2	7/16	9/16	1800	HTS	15000
5130-01-054-7186	A	3	0.0060	1/2	3/4	1	7650	CRS	15000
5130-01-122-1135	A	3	0.0060	1/2	7/16	9/16	7100	CRS	8000
5130-00-555-3377	A	4	0.0030	3/8	3/4	1	31000	CRS	4500
5130-00-293-2015	A	4	0.0060	1/2	3/4	1	10400	HTS	4500
5130-00-880-3547	A	4	0.0060	1/2	3/4	1	10900	CRS	4500
5130-00-528-2167	A	4	0.0095	1/2	3/4	1	5600	HTS	4500
5130-00-880-3544	A	4	0.0100	1/2	3/4	1	5600	CRS	4500
5130-00-528-2166	A	4	0.0118	1/2	3/4	1	4400	HTS	4500
5130-00-293-2719	A	4	0.0140	1/2	3/4	1	2500	HTS	4500
5130-00-293-0260	A	6	0.0060	1/2	1-5/16	1-11/16	19000	HTS	4000
5130-00-293-2732	A	6	0.0095	1/2	1-5/16	1-11/16	7600	HTS	4000
5130-00-435-4199	A	6	0.0100	1/2	1-5/16	1-11/16	7600	CRS	4000
5130-00-293-0263	A	6	0.0118	1/2	1-5/16	1-11/16	5100	HTS	4000
5130-01-170-0131	A	6	0.0118	5/8	1-5/16	1-11/16	5100	HTS	4500
5130-00-293-0262	A	6	0.0118	1	1-5/16	1-11/16	5100	HTS	4000
5130-00-293-2718	A	6	0.0140	1/2	1-5/16	1-11/16	3800	HTS	4000
5130-00-542-4819	A	6	0.0140	5/8	1-5/16	1-11/16	3800	HTS	4000
5130-00-293-0259	A	6	0.0160	3/8	1-5/16	1-11/16	3000	HTS	4000
5130-01-017-3635	A	8	0.0060	3/4	1-11/16	2-1/16	18900	HTS	3500
5130-00-293-2712	A	8	0.0060	1-1/4	1-11/16	2-1/16	18900	HTS	3500
5130-00-293-2727	A	8	0.0095	1/2	1-11/16	2-1/16	8000	HTS	3500
5130-00-293-2733	A	8	0.0118	1/2	1-11/16	2-1/16	6400	HTS	3500
5130-00-226-5141	A	8	0.0140	1/2	1-11/16	2-1/16	4600	HTS	3500
5130-00-293-2006	A	8	0.0140	3/4	1-11/16	2-1/16	4600	HTS	3500
5130-00-293-0267	A	8	0.0160	3/8	1-11/16	2-1/16	3000	HTS	3500
5130-00-293-0268	A	8	0.0204	5/8	1-11/16	2-1/16	2000	HTS	3500
5130-00-293-2710	A	10	0.0060	1-1/4	2-1/4	2-3/4	26700	HTS	3000
5130-00-293-2731	A	10	0.0095	3/4	2-1/4	2-3/4	10000	HTS	3000
5130-00-293-2726	A	10	0.0095	1-1/4	2-1/4	2-3/4	10000	HTS	3000
5130-00-226-5142	A	10	0.0104	5/8	2-1/4	2-3/4	8000	HTS	3000
5130-00-293-2717	A	10	0.0140	1/2	2-1/4	2-3/4	4600	HTS	3000
5130-00-528-2171	A	10	0.0140	3/4	2-1/4	2-3/4	4600	HTS	3000
5130-00-473-6441	A	10	0.0140	1-1/4	2-1/4	2-3/4	4600	HTS	3000
5130-00-293-2003	A	10	0.0160	1/2	2-1/4	2-3/4	3600	HTS	3000
5130-00-293-2709	A	12	0.0060	1-1/4	2-3/4	3-1/4	28700	HTS	2750
5130-00-293-0265	A	12	0.0118	1-1/4	2-3/4	3-1/4	7400	HTS	2750
5130-00-293-2714	A	12	0.0140	1-1/4	2-3/4	3-1/4	5400	HTS	2750
5130-01-035-8129	B	3	0.0140	3/8	9/16	11/16	5700	CRS	20000
5130-00-473-6440	B	4-1/2	0.0118	1/2	9/16	1	13400	HTS	4500
5130-00-293-0258	B	4-1/2	0.0140	7/16	9/16	1	9000	HTS	4500
5130-00-293-2014	B	4-1/2	0.0140	1/2	9/16	1	9000	HTS	4500
5130-00-293-1987	B	6	0.0050	1/2	7/8	1-5/16	59000	HTS	4000
5130-01-043-2286	B	6	0.0060	1/2	7/8	1-5/16	43700	HTS	4500
5130-00-528-2169	B	6	0.0118	1/2	7/8	1-5/16	15360	HTS	4000
5130-00-540-7141	B	6	0.0140	1/2	7/8	1-5/16	9000	HTS	4000
5130-00-455-5419	B	6	0.0140	5/8	7/8	1-5/16	9000	CRS	4000
5130-00-473-6444	B	6	0.0140	2	7/8	1-5/16	9000	HTS	4000
5130-00-293-0257	B	6	0.0204	1/2	7/8	1-5/16	6000	HTS	4000
5130-01-049-8376	B	7	0.0140	2	7/8	1-5/16	11800	HTS	3600
5130-00-293-2730	B	8	0.0095	1	1-5/16	1-11/16	26000	HTS	3500
5130-00-293-2729	B	8	0.0104	1-1/4	1-5/16	1-11/16	24800	HTS	3500
5130-00-528-2168	B	8	0.0118	1/2	1-5/16	1-11/16	21000	HTS	3500
5130-00-473-6445	B	8	0.0140	1	1-5/16	1-11/16	14400	HTS	3500

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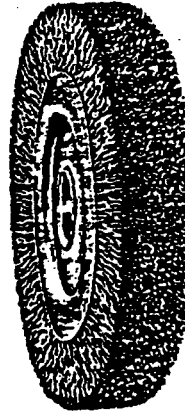
National Stock Number	Style	Outside Brush Diameter (Inches)	Wire Diameter (Inch)	Arbor Hole Diameter (Inches)	Wire Trim Length (min.) (Inches)	Wire Trim Length (max.) (Inches)	Number of Wire Points (min.)	Material	Max. Safe Free Speed (rpm)
5130-00-630-4435	B	10	0.0060	7/8	1-3/4	2-1/4	110000	HTS	3000
5130-00-293-1997	B	10	0.0104	2	1-3/4	2-1/4	39000	HTS	3000
5130-00-293-2017	B	10	0.0104	3/4	1-3/4	2-1/4	36000	HTS	3000
5130-00-293-2723	B	10	0.0118	1/2	1-3/4	2-1/4	28000	HTS	3000
5130-00-293-2724	B	10	0.0118	3/4	1-3/4	2-1/4	28000	HTS	3000
5130-00-293-2000	B	10	0.0118	7/8	1-3/4	2-1/4	28000	HTS	3000
5130-00-596-7695	B	10	0.0118	1	1-3/4	2-1/4	28000	HTS	3000
5130-00-293-1998	B	10	0.0104	7/8	1-3/4	2-1/4	23000	HTS	3000
5130-00-435-2144	B	10	0.0204	1	1-3/4	2-1/4	9600	HTS	3000

BRS - brass
 CRS - corrosion-resisting steel
 HTS - high carbon tempered steel
 HUS - high carbon untempered steel

Tolerance: Outside diameter - plus or minus 1/8 inch.
 Wire diameter - plus or minus 0.001 inch.
 Arbor hole diameter - for 5/8 inch and smaller, plus 0.005 inch, minus 0 inch.
 for larger than 5/8 inch, plus 0.006 inch, minus 0 inch.



Style A



Style B

Free speed test. The brush shall be attached to a power source and rotated as follows:

- under 6 inch brush diameter, rotated at a speed 20 percent faster than the maximum free speed indicated in the table.
- between 6 and 8 inch, inclusive, brush diameter, rotated at a speed 30 percent faster than the maximum free speed indicated in the table.
- over 8 inch brush diameter, rotated at a speed 50 percent faster than the maximum free speed indicated in the table.

The brush shall be shrouded in an enclosure capable of capturing all fill wire or other debris that may become separated from the brush during the test. The brush shall be rotated at the maximum free speed indicated in the table for one minute. The interior of the enclosure shall then be examined for any wire or other foreign matter ejected from the brush. Any evidence of fill wire separation, other than trimmings, shall be cause for rejection of the lot.

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Quality assurance provisions.

Inspection. Sampling for inspection shall be in accordance with MIL-STD-105, Sampling Procedures and Tables for Inspection by Attributes, except where otherwise indicated herein. The lot size shall consist of all brushes of the same style and size offered for acceptance at one time. The sample unit is one brush.

Examination for visual requirements. Each brush shall be examined for workmanship and marking requirements. The inspection level shall be Inspection Level II with an acceptable quality level (AQL) of 2.5 defects per hundred units.

Examination for dimensional requirements. Each brush shall be examined for dimensional requirements. The inspection level shall be Inspection Level I with an AQL of 2.5 defects per hundred units.

Testing for free speed test requirements. Each brush shall be examined for conformance to the requirements of the free speed test. The inspection level shall be Special Inspection Level S-3 with an AQL of 2.5 defects per hundred units.

Preservation, packaging, packing, labeling, and marking. The preservation, packaging, packing, labeling, and marking shall be as specified in the contract or order.

NOTES:

The issue of the referenced documents in effect on the date of the solicitation shall be used to determine compliance with the stated requirements.

ANSI Standards are available from American National Standards Institute, Inc., 1430 Broadway, New York, NY 10018.

Military Standards are available from Naval Publications and Forms Center, 5801 Tabor Avenue, Philadelphia, PA 19120.

PREPARING ACTIVITY:

GSA-FSS