

General Information and Selection for Transducer Applications

There is a strong element of craftsmanship involved in making consistently successful strain gage installations. As for any other field, this craft has its own special tools and working materials — found by seasoned professionals to be most effective for achieving the desired results. The installation accessories described on this and the following pages represent the distillation of many years' experience in determining the most appropriate tool or material for each task in the gage installation process.

Every accessory item listed here has been thoroughly tested and evaluated in the Vishay Micro-Measurements Applications Engineering Laboratory for quality and reliability, for ease of use, and for compatibility with all other Vishay Micro-Measurements products. It should be noted that the instruction bulletins supplied for gages, adhesives, protective coatings, etc. assume the availability of these accessories to the user, since such is generally the case for an experienced practitioner in a well-equipped laboratory.

TOOLS



SSH-1 Surgical Shears:

Chromium steel, 4-1/2 in [115 mm] long, with one sharp pointed blade and one blunt-end blade.

STW-1 Tweezers:

Stainless steel, 4-1/2 in [115 mm] long. Rugged, precision ground sharp ends. Primarily used for handling leadwires.

BTW-1 Tweezers:

Stainless steel, 4-1/2 in [115 mm] long. Antimagnetic; acid and corrosion resistant. Thin, flat blunt ends ideal for safe handling of strain gages.

DPR-1 Dental Probe:

Stainless steel "pick". Flexible 75° pointed tip.

SSC-1 Surgical Scalpel and Blade:

Stainless steel, uses SSC-2 snap-in replacement blade.

SSC-2 Replacement Scalpel Blades:

Five blades per package.

SSS-1 Steel Scale:

6 in [150 mm] long, satin-chromed finish. Graduated in inches (1/32, 1/64, 1/10, 1/100).

SSS-2 Steel Scale:

6 in [150 mm] long, satin-chromed finish. Graduated in inches (1/10, 1/100) and millimeters (0.5, 1).

DP-1 4-H Drafting Pencil:

For gage layout.

DWC-1 Diagonal Cutters:

Stainless steel, 4-1/2 in [115 mm] long, precision cutter for wire up to AWG No. 18 [1 mm diameter].

NNP-1 Needle-Nosed Pliers:

Nickel-chrome plated, 4-1/2 in [115 mm] long, with serrated needle-nosed jaws.

ATS-2 Gage Application Tool Set:

Includes one of each item plus one additional DPR-1 Dental Probe. Durable, polypropylene box.

General Information and Selection for Transducer Applications

TOOLS



GT-11

SPT-2

SPT-1



HTC-1

GT-11 Camel's Hair Brush:

3/8 in [9.5 mm].

SPT-1 Stainless Steel Mixing Spatula:

Double blade. Overall length 8 in [200 mm].

SPT-2 Stainless Steel Mixing Spatula:

Single blade. Overall length 7-3/4 in [195 mm]. Wooden handle.

HTC-1 Temperature Controlled Hotplate:

Temperature range +100° to +600°F [+40° to +315°C]. Calibrated bimetallic thermostat. 3-1/2 in [90-mm] diameter aluminum alloy top plate. Embedded heating elements for high thermal conductivity. 120 Vac 6-ft [1.8-m] linecord, 3-wire plug.

WTS THERMAL WIRE STRIPPER



WTS-1

The ease and simplicity of operation of the Thermal Wire Stripper make it ideal for most strain gage leadwire stripping. The variable heat control allows stripping of all thermoplastic insulations, including Teflon®, in sizes No. 18 to No. 36 AWG [1 to 0.1 mm diameter]. The foot switch and tweezer handpiece give excellent operator control over the stripping operation. Includes power unit and foot switch, both with 3-wire NEMA plugs, and tweezer handpiece.

WTS-1: 110 Vac

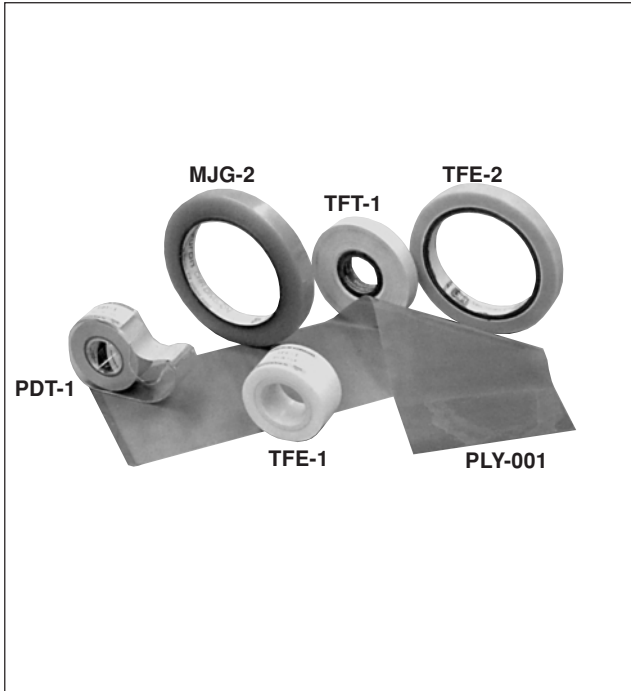
WTS-2: 220 Vac

WTS-A Replacement Elements

Set of two.

General Information and Selection for Transducer Applications

HIGH-TEMPERATURE TAPES & MATERIALS



PDT-1 Paper Drafting Tape:

For soldering mask, and lead positioning. 3/4 in x 400 in [19 mm x 10 m].

PLY-001 Kapton® Film:

For electrical insulation, 4 x 10 x 0.001 in thick. [100 x 250 x 0.02 mm thick].

MJG-2 Mylar® Tape:

For gage handling with heat-curing resin systems. 1/2 in x 216 ft [13 mm x 66 m].

TFT-1 Thermosetting (+340°F [+170°C]) Fiberglass Tape:

For electrical insulation at high temperatures. 1/2 in x 66 ft [13 mm x 20 m].

TFE-1 Teflon Film:

0.003 in x 1 in x 50 ft [0.08 mm x 25 mm x 15 m].

TFE-2 High Modulus TFE Teflon® with Silicone Mastic:

1/2 in x 108 ft [13 mm x 33 m].

CLAMPING SUPPLIES



HSC-1 Spring Clamp:

Maximum Opening: 1 in [25 mm].
Maximum Recommended Opening: 1/2 in [13 mm].
Nominal Clamp Force at Recommended Opening: 30 lbf [135 N].

HSC-2 Spring Clamp:

Maximum Opening: 2 in [51 mm].
Maximum Recommended Opening: 1 in [25 mm].
Nominal Clamp Force at Recommended Opening: 25 lbf [110 N].

HSC-3 Spring Clamp:

Maximum Opening: 3 in [76 mm].
Maximum Recommended Opening: 1-1/2 in [38 mm].
Nominal Clamp Force at Recommended Opening: 25 lbf [110 N].

GT-12 Neg'ator Constant Force Extension Spring Clamp:

1 x 0.006 x 38 in [25 mm x 0.4 mm x 0.97 m] stainless steel band, drum I.D. 1.16 in [30 mm], 10.6 lb [47 N] load.

TFE-1 Teflon Film:

0.003 in x 1 in x 50 ft [0.08 mm x 25 mm x 15 m].

GT-14 Pressure Pads and Backup Plates:

Kit of 12 Silicone Rubber Pads 3/32 x 1/2 x 1-1/4 in [2.5 x 13 x 32 mm], and 12 aluminum plates, 1/8 x 1/2 x 1-1/4 in [3 x 13 x 32 mm].

SGP-1 Silicone Rubber:

Three pieces, each 3/32 x 1 x 6 in [2.5 x 25 x 150 mm].

SGP-2 Silicone Rubber:

One piece, 3/32 x 6 x 6 in [2.5 x 150 x 150 mm].

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