

ALPHA[®] EXACTALLOY[®] PREFORMS

Exactalloy Preform Washers and Sleeves

DESCRIPTION

ALPHA Exactalloy Preform Washers and Sleeves provide a unique ability to deliver a precise amount of solder volume and an extremely precise shape, thus ensuring the construction of a solder joint with a high degree of reflow consistency and net solder shape, thickness and performance.

The preform washers can be provided unfluxed, with an external flux coating or with a flux core. On the other hand, the preform sleeves is available unfluxed or with an external flux coating. With precise control over the flux type and amount, and a consistent soldering surface, an extremely repeatable solder joint is formed.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

FEATURES & BENEFITS

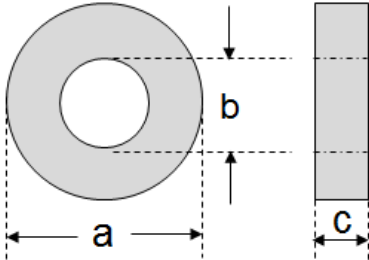
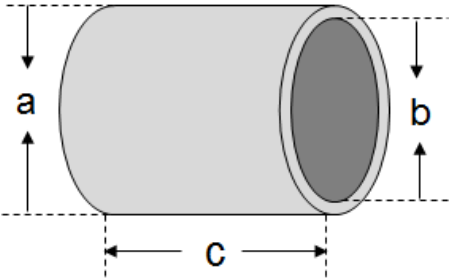
Features

- Washers and Sleeves with a wide range of sizes (outer diameter, inner diameter and thickness)
- Available with external flux coating or flux cored with various flux activity levels to address varying soldering applications
- Available in a variety of alloys to meet specific application requirements, including low-temperature alloys

Benefits

- Precise solder volume control to address reliability issues in PCB assembly applications such as hole-fill
- Maintenance-free implementation into automated feeder systems due to the cored flux capability
- Excellent control of post-reflow solder shape and volume
- Precise flux activity level and flux volume appropriate for surfaces to be soldered
- Stand-alone soldering capability without need for a flux carrier such as solder paste or liquid flux
- Ability to solder temperature-sensitive components

PRODUCT INFORMATION

Washers	Sleeves
	
<p style="text-align: center;">Washers</p> <p>OD (Outside Diameter) Min. = 0.76mm (0.030") Max. = 47.63mm (1.875")</p> <p>ID (Inside Diameter) Min. = 0.25mm (0.0098") Max. = 34.93 (1.375")</p> <p>T (thickness) Min. = 0.10mm (0.004") Max. = 2.80mm (0.11")</p>	<p style="text-align: center;">Sleeves</p> <p>OD (Outside Diameter) Min. = 1.44mm (0.057") Max. = 26.70mm (1.051")</p> <p>ID (Inside Diameter) Min. = 1.24mm (0.049") Max. = 26.00mm (1.024")</p> <p>T (thickness) Min. = 0.60mm (0.024") Max. = 12.00mm (0.472")</p>

Packaging	
Washers	250cc plastic jar
Sleeves	Segmented trays

Standard	Alloy Designation		Melting or Solidus / Liquidus Temp °C
J-STD-006B	Pb-Free	SAC305 / 387 / 357 / 405 96.5Sn3.5Ag / 96Sn4Ag	217 to 221
	Low-Temp	42Sn57.6Bi0.4Ag 50Sn32Pb18Cd Sn42Bi58	138 to 145
	High-Temp	5Sn93.5Pb1.5Ag	280 to 284
	High Reliability	INNOLOT Sn95 Sb5	206 to 218 232 to 240
	Sn-Pb	63Sn37Pb / Sn62Pb36Ag2 / 60Sn40Pb	179 to 188
Proprietary	Low Silver	SACX® Plus 0307	217 to 228

Note: Sizes vary based on alloy type.

Contact your local MacDermid Alpha Sales Office to discuss your specific alloy, size, and packaging options.

APPLICATION GUIDELINES

ALPHA Exactalloy Preform Washers provides an ideal method of not only delivering the precise solder volume and flux needed for various assembly applications but can eliminate secondary assembly processes. A preform washers can be placed over connector pins or lugs during a standard surface mount PCB assembly process to provide ample hole-fill and fillet formation to through hole components. They are also an effective solder attachment method for assembling electronic and non-electronic components. A wide range of solder alloys and fluxes provide the ability to assemble just about any metallic assembly while providing a hermetic seal at the same time.

ALPHA Exactalloy Preform Sleeves are used in a wide range of applications including connector and cable assembly for aeronautic, automotive, and marine (AAM). Alpha supplies solder sleeves to the global leaders in cable assembly products.

ALPHA Exactalloy Preform Washers and Sleeves also come in low-temperature alloys, which provide an important application advantage. These alloy advantages, when combined with Alpha's broad flux offering provides an attractive solder system. The alloy ranges cover both eutectic and non-eutectic options, the choice of which is extremely application dependent, thus providing some unique features that can be leveraged in specific applications.

Based on the specific application, flux can be integrated with an ALPHA Exactalloy Preform Washers and Sleeves. Preform Washers feature both external and internal flux application options while a Sleeves offers only external flux coating. In order to ensure good wetting, the flux must be appropriate for the surfaces to be soldered. The flux choices offer a broad range of activity levels, to provide the most application flexibility. For more information on the type of fluxes available, contact your local MacDermid Alpha Sales Representative.

RECYCLING SERVICES

We provide safe and efficient recycling services to help companies meet their environmental and legislative requirements and at the same time, maximize the value of their waste streams.

Our service collects solder dross, solder scrap, and various forms of solder paste waste. Please contact your local sales representative for recycling capabilities in your area or [link here](#).



SAFETY & WARNING

It is recommended that the company/operator read and review the Safety Data Sheets for the appropriate health and safety warnings before use. **Safety Data Sheets are available at MacdermidAlpha.com/assembly-solutions/knowledge-base.**

STORAGE

Storage in a nitrogen cabinet is recommended after opening. The shelf life of the product varies by alloy. Consult the Storage Recommendations for ALPHA Exactalloy Solder Preforms Reference Bulletin for more information on storage and shelf life recommendations.

CONTACT INFORMATION

**To confirm this document is the most recent version, please contact
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www.macdermidalpha.com**

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Also read carefully warning and safety information on the Safety Data Sheet. This data sheet contains technical information required for safe and economical operation of this product. READ IT THOROUGHLY PRIOR TO PRODUCT USE . Emergency safety directory assistance: US 1 202 464 2554, Europe + 44 1235 239 670, Asia + 65 3158 1074, Brazil 0800 707 7022 and 0800 172 020, Mexico 01800 002 1400 and (55) 5559 1588

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