





Wenn's ums Löten geht When it's about soldering Quand il s'agit du soudage

# **Technical Data Sheet**

# **STANNOL<sup>®</sup>** solder wires of the KS-Series

NO-CLEAN SOLDER WIRES WITH CLEAR RESIDUES

**STANNOL**<sup>®</sup> **KS-Series** electronic solder wires have been designed for special requirements of lead-free soldering. They meet all demands of industrial manufacturing as well as for rework and repair.

## Description

STANNOL<sup>®</sup> solder wire KS115 contains a rosin-free, halide activated synthetic resin.

The STANNOL® KS100 is based on the same synthetic resin however it is halide free activated.

All mentioned flux types are an excellent combination of high activity at thermal stress with amber bright and electrically safe residues.

The flux formulations **KS115** is classified to DIN EN 29454-1 Type 1.2.2.B. Due to its high activity (1.5%), the flux is classified as REM1 to IEC 61190-1-3.

The KS100 is classified to DIN EN 29541- Type 1.2.3.B and REL0 to IEC 61190-1-3.

#### The synthetic resins offer more advantages as natural rosin:

| > Active flux            | <ul> <li>fast wetting of solder pads and pins</li> </ul>                       | shorter cycle times   |
|--------------------------|--|---|
| Bright amber<br>residues | <ul> <li>low thermal decomposition at soldering<br/>temperatures</li> </ul>    | <ul> <li>optical impression ok</li> </ul>   |
| Solid residues           | <ul> <li>high softening point</li> </ul>                                       | chemical and physical safety  |
| Low fuming               | <ul> <li>low decomposition and evaporation at<br/>high temperatures</li> </ul> | <ul> <li>low contamination of work place and<br/>around the solder joint</li> </ul> |
| Low spitting             | <ul> <li>high viscosity of the flux reduces spitting</li> </ul>                | low contamination   |

## Application

**STANNOL<sup>®</sup> solder wire KS115** is designed for use with robotic and manual soldering for electric and electronic devices. Flux residues may remain uncleaned. This must be examined in individual cases, where environmental stress is applied to the circuit.

If cleaning is necessary for optical or technical reasons, we recommend the use of the cleaner **STANNOL**<sup>®</sup> **Flux-Ex 500**.







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| Physical Properties of the Flux   |  |                    |                |  |  |
|---|--|--------------------|----------------|--|--|
| General properties  |  | KS100              | KS115          |  |  |
| Flux type:  | EN 29454-1                               | 1.2.3 (F-SW33)     | 1.2.2 (F-SW28) |  |  |
|   | IEC 61190-1-3                            | REL0               | REM1           |  |  |
| Flux content:   | EN 12224                                 | 3.0 weight % ± 0.3 |                |  |  |
| Halide content:   | EN 29455-6                               | 0.0%               | 1.5%           |  |  |
| Corrosivity:  | EN 29455-15                              | none               |                |  |  |
| Surface Insulation<br>Resistance:                                       | 85 °C / 85 %RH,<br>IPC TM 650 2.6.3.3    | >10 <sup>8</sup> Ω |                |  |  |
| Standard alloys<br>acc. to ISO 9453:2006<br>with micro additives <0.05% | lead-free (FLOWTIN <sup>®</sup> Series): |                    |                |  |  |
|   | FLOWTIN <sup>®</sup> TC (Sn99Cu1)        |                    |                |  |  |
|   | FLOWTIN <sup>®</sup> TSC (Sn95Ag4Cu1)    |                    |                |  |  |
|   | FLOWTIN <sup>®</sup> TSC305 (Sn96Ag3Cu1) |                    |                |  |  |
| Available diameters:  | from 0.3 mm                              |                    |                |  |  |
| Available reel sizes:   | 250 g, 500 g, 1 kg                       |                    |                |  |  |

Other alloys, flux contents or reel sizes are available on request.

# Health and Safety

Before using please read the material safety data sheet carefully and observe the safety precautions described.

The mentioned values are typical and represent no form of specification. The Data Sheet serves for information purposes. Any verbal or written advise is not binding for the company, whether such information originates from the company offices or from a sales representative. This is also in respect of any protection rights of third parties, and does not release the customer from the responsibility of verifying the products of the company for suitability of use for the intended process or purpose. Should any liability on the part of the company arise, the company will only indemnify for loss or damage to the same extent as for defects in quality. TDB\_LD\_KS-Serie\_EN

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