

**FELDER-ISO-*Core*<sup>®</sup> "RA" – lead-free**

**Flux-cored, halide-containing activated soft solder wire,  
 flux according to DIN EN 29454.1, 1.1.2.B  
 respectively DIN EN 61190-1-3, ROM1**

**RoHS-conformity according to 2002/95/EG\***

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Article no.: (55)18.....

**Description**

Standard solder wire for hand soldering in the electrical engineering, electro mechanics and partly also in the electronics. The flux distinguishes itself through its high temperature resistance and does not spatter during the reflow soldering. An optimal wetting as well as standard excelling spreading values make this lead-free solder wire an advanced product among the cored solders.

**\*Lead-free FELDER-ISO-*Core*<sup>®</sup> "RA"-solder wires do not contain any substances that are subject to restriction by directive 2002/95/EG ("RoHS").**

**Lead-free standard solder alloys**

Alloy	ISO EN 9453	DIN EN 61190	Melting range	Article no.
Sn100Ni+ (SnCu0.7)	S-Sn99Cu1(AgNiGe)	Sn99Cu.7	227 °C	551894....
Sn99Ag+ (SnCu0.7Ag0.3)	S-Sn98AgCu1(NiGe)	-	217 – 227 °C	551881....
Sn96Ag+ (SnAg3Cu0.5)	S-Sn96Ag3Cu1(NiGe)	Sn96Ag03Cu0.4	217 – 219 °C	551876....
Sn95Ag+ (SnAg3.8Cu0.7)	S-Sn95Ag4Cu1(NiGe)	Sn96Ag04Cu0.7	217 °C	551884....
Sn96.5Ag3Cu0.5	S-Sn96Ag3Cu1	Sn96Ag03Cu0.4	217 – 219 °C	1876....
Sn95.5Ag3.8Cu0.7	S-Sn95Ag4Cu1	Sn96Ag04Cu0.7	217 °C	1884....
Sn95Ag5	S-Sn95Ag5	Sn95Ag05	221 – 240 °C	1892....
Sn96.5Ag3.5	S-Sn96Ag4	Sn96Ag04	221 °C	1896....
Sn97Ag3	S-Sn97Ag3	-	221 – 224 °C	1895....
Sn99.3Cu0.7	S-Sn99Cu1	Sn99Cu.7	227 °C	1894....
Sn97Cu3	S-Sn97Cu3	-	227 – 310 °C	1897....

Further lead-free alloys can be delivered on customer's request.

**Patents**

FELDER GMBH produces all NiGe-alloys with the licence for Fuji-patents (JP 3296289, USP 6.179.935 B1 and DE 198 16 671 C2), as well as (if desired) all SAC-solders according to Senju-patent (JP 3027441) and ISURF-patent (US 5.527.628).

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**Properties**

- Flux type : Halogen activated 1.1.2.B, (ROM1, F-SW26)  
Flux content : 2.5 % standard  
Flux spreading : 1 – (standard), 3 – und 5 – cores  
Halide content : 1.0 %  
Ø in mm : 0.25, 0.35, 0.50, 0.75, 1.00, 1.50, 2.00, 3.00, 4.00, 5.00, 6.00  
Spool sizes in kg : 0.10, 0.25, 0.50, 1.00, 2.50, 5.00

**Impurity/tolerances**

e.g.: SAC 305

<b>Element content (%)</b>	<b>Ag</b>	<b>Al</b>	<b>As</b>	<b>Bi</b>	<b>Cd</b>	<b>Cu</b>	<b>Fe</b>
	3.0± 0.2	0.0010	0.0030	0.0200	0.0010	0.5± 0.2	0.0050
<b>Element content (%)</b>	<b>Pb</b>	<b>Sb</b>	<b>Sn</b>	<b>Zn</b>			
	0.0700	0.0400	96.5± 0.5	0.0010			

e.g.: Sn100Ni+

<b>Element content (%)</b>	<b>Ag</b>	<b>Al</b>	<b>As</b>	<b>Bi</b>	<b>Cd</b>	<b>Cu</b>	<b>Fe</b>
	0.0600	0.0010	0.0030	0.0200	0.0010	0.7± 0.2	0.0050
<b>Element content (%)</b>	<b>Ge</b>	<b>Ni</b>	<b>Pb</b>	<b>Sb</b>	<b>Sn</b>	<b>Zn</b>	
	0.01±0.002	0.07±0.02	0.0700	0.0400	96.5± 0.5	0.0010	

**Washing**

The bright, solid flux residues will provoke also with nonferrous metals no corrosion. Therefore, they can remain on the soldering joint. On usage in the electronic production we recommend the removal of the flux residues with all current PCB'S cleaners on alkaline basis.

**Storage**

Store dry and dust-free as far as possible. Best before end of 24 months.

**Advices for Handling**

Please refer to the corresponding EG safety data sheet

**Further Advices**

We are delighted to produce all solder wires according to your company standard.

All information about our products are the result of our long standing experience, which we would like to pass on to our customers. Since we do not have any influence on the application with our products, please see the warranty claims in our conditions of sale because our liability is limited.