

Product Information

FELDER-ISO-Core[®] "RA" - lead-free

Flux-filled, halide activated soft solder wire,
flux according to ISO 9454-1, 1123 resp. DIN EN 61190-1-1, ROM1,
RoHS-conformity according to 2011/65/EU

Item no.: (55)18.....

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

This product information does not constitute warranted properties.

Application

Standard solder wire for hand soldering in the field of electrical engineering, electromechanics and partly in the field of electronics also. An optimal wetting as well as standard exceeding spreading values makes this lead-free solder wire to a top-quality product among the cored solder wires. The flux characterises itself by high temperature resistance. Thus in theory iron tip temperatures up to 450° C may be chosen (optimally 370° to 380° C). The hold time after the solder's molten should not exceed 5 seconds!

Solder joints which have been made with the following lead-free solder alloys are continuous temperature resistant up to 150° C. A cryogenic temperature resistance at least up to -96° C is also given.

Lead-free Standard Solder Alloys

Alloy	ISO 9453:2014	DIN EN 61190	Melting range	Item no.
Sn100Ni+	Sn99,25Cu0,7Ni0,05(Ge)	Sn99Cu.7	227°C	551894....
Sn99Ag+	Sn99Cu0,7Ag0,3(NiGe)	-	217 – 227°C	551881....
Sn96Ag+	Sn96,5Ag3Cu0,5(NiGe)	Sn96Ag03Cu0,4	217 – 219°C	551876....
Sn96,5Ag3Cu0,5	Sn96,5Ag3Cu0,5	Sn96Ag03Cu0,4	217-219°C	1876....
Sn95,5Ag3,8Cu0,7	Sn95,5Ag3,8Cu0,7	Sn96Ag04Cu0,7	217°C	1884....
Sn95Ag5	Sn95Ag5	Sn95Ag05	221 – 240°C	1892....
Sn96,5Ag3,5	Sn96,5Ag3,5	Sn96Ag04	221°C	1896....
Sn97Ag3	Sn97Ag3	-	221 – 224°C	1895....
Sn99,3Cu0,7	Sn99,3Cu0,7	Sn99Cu.7	227°C	1894....
Sn97Cu3	Sn97Cu3	-	227 – 310°C	1897....

Further lead-free alloys are deliverable on customer's request.

Properties

Flux type acc. to ISO 9454-1: 1123 (1.1.2.B, ROM1, F-SW26)
 Flux content: 2.5 % standard
 Flux spacing: 1- (standard), 3- and 5- cored
 Halide content: approx. 1.0 %

Washing

The clear solid flux residues do also not cause corrosion at non-ferrous metals. Therefore they may remain on the soldering joint. On application in the electronic production we recommend to remove the flux residues with common P.C.B. cleaning agents on alkaline basis.

Impurities/Tolerances acc. to DIN EN ISO 9453:2014

e.g.: SAC 305

Element	Ag	Al	As	Au	Bi	Cd	Cu
Content (%)	3.0± 0.2	0.001	0.03	0.05	0.1	0.002	0.5± 0.2
Element	Fe	In	Ni	Pb*	Sb	Sn	Zn
Content (%)	0.02	0.1	0.01	0.07	0.1	Rest	0.001

e.g.: Sn100Ni+

Element	Ag	Al	As	Au	Bi	Cd	Cu
Content (%)	0.1	0.001	0.03	0.05	0.1	0.002	0.7± 0.2
Element	Fe	Ge	Ni	Pb*	Sb	Sn	Zn
Content (%)	0.02	0.01±0.002	0.02-0.08	0.07	0.1	Rest	0.001

* The maximum lead content in FELDER electronic solder wires is 0.05 % (standard requirement 0.07 %).

Advices

Lead-free FELDER-ISO-Core® "RA" solder wires do not contain any substances that are subject to restriction by directive 2011/65/EU ("RoHS II").

Handling: please refer to the corresponding EC material safety data sheet.

Storage: store at room temperature, dry and as far as possible dust-free. Durable at least for 60 months.

Delivery forms

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 size in kg: 0.10, 0.25, 0.50, 1.00, 2.50, 5.00