

Solder wire ISO-Core® “RA“, „RA-05“

Flux-filled, halogen-containing activated soft solder wire

Flux according to DIN EN ISO 9454-1, 1123; DIN EN 61190-1-1 / IPC J-STD-004, ROM1

Standard solder wire for manual soldering in electrical engineering,

Standard flux content 2.5 %

Halogenide content 1.0%; also available as RA-05 with a halogenide content < 0.5% and

thus as ROL1 according to IPC J-STD-004!

Ø in mm 0,25 • 0,50 • 0,75 • 1,00 • 1,50 • 2,00 • 3,00

Spools in kg 0,10 • 0,25 • 0,50 • 1,00 • 5,00 • 10,00



Alloy	DIN EN ISO 9453:2014	DIN EN 61190-1-3	Melting range	lead-free/-containing
Sn95,5Ag3,8Cu0,7	Sn95,5Ag3,8Cu0,7	Sn95,5Ag3,8Cu,7	217 °C eutektic	lead-free
Sn96,5Ag3,0Cu0,5	Sn96,5Ag3Cu0,5	Sn96,5Ag3Cu,5	217 - 219 °C	
Sn97Ag3	Sn97Ag3	Sn97Ag3	221 - 224 °C	
Sn99,3Cu0,7	Sn99,3Cu0,7	Sn99,3Cu,7	227 °C eutektic	
Sn97Cu3	Sn97Cu3	Sn97Cu3	227 - 310 °C	
Sn100Ni+ / SN100 ⁻⁴⁰³ C	Sn99,25Cu0,7Ni0,05	Sn99,25Cu,7Ni,05	227 °C eutektic	
Sn99Ag+	Sn99Cu0,7Ag0,3(NiGe)	Sn99Cu,7Ag,3(NiGe)	217 - 227 °C	
Sn60Pb40	Sn60Pb40E	Sn60Pb40	183 - 190 °C	lead-containing
Sn60Pb38Cu2	Sn60Pb39Cu1	Sn60Pb38Cu02	183 - 190 °C	
Pb50Sn50	Pb50Sn50	Sn50Pb50	183 - 215 °C	
Pb60Sn40	Pb60Sn40	Sn40Pb60	183 - 238 °C	
Pb93Sn5Ag2	Pb93Sn5Ag2	Sn05Pb93Ag02	296 - 301 °C	RoHS-conformal: Pb > 85 %

Other alloys, diameters and coil sizes on request.

Solder wire ISO-Core® “EL“

Flux-filled, halogen-free activated soft solder wire

Flux according to DIN EN ISO 9454-1, 1131; DIN EN 61190-1-1 / IPC J-STD-004, ROLO.

No-clean standard solder wire for manual soldering in electronics,

Standard flux content 3.5 %.

Ø in mm 0,25 • 0,50 • 0,75 • 1,00 • 1,50 • 2,00 • 3,00

Spools in kg 0,10 • 0,25 • 0,50 • 1,00 • 5,00 • 10,00



Alloy	DIN EN ISO 9453:2014	DIN EN 61190-1-3	Melting range	lead free/-containing
Sn95,5Ag3,8Cu0,7	Sn95,5Ag3,8Cu0,7	Sn95,5Ag3,8Cu,7	217 °C eutektic	lead-free
Sn96,5Ag3,0Cu0,5	Sn96,5Ag3Cu0,5	Sn96,5Ag3Cu,5	217 - 219 °C	
Sn97Ag3	Sn97Ag3	Sn97Ag3	221 - 224 °C	
Sn99,3Cu0,7	Sn99,3Cu0,7	Sn99,3Cu,7	227 °C eutektic	
Sn97Cu3	Sn97Cu3	Sn97Cu3	227 - 310 °C	
Sn100Ni+ / SN100 ⁻⁴⁰³ C	Sn99,25Cu0,7Ni0,05	Sn99,25Cu,7Ni,05	227 °C eutektic	
Sn99Ag+	Sn99Cu0,7Ag0,3(NiGe)	Sn99Cu,7Ag,3(NiGe)	217 - 227 °C	
Sn60Pb40	Sn60Pb40E	Sn60Pb40	183 - 190 °C	lead-containing
Sn60Pb38Cu2	Sn60Pb39Cu1	Sn60Pb38Cu02	183 - 190 °C	
Pb50Sn50	Pb50Sn50	Sn50Pb50	183 - 215 °C	
Pb60Sn40	Pb60Sn40	Sn40Pb60	183 - 238 °C	
Pb93Sn5Ag2	Pb93Sn5Ag2	Sn05Pb93Ag02	296 - 301 °C	RoHS-conformal: Pb > 85 %

The qualities „EL“ and „ELR“ have been tested by Siemens (Certification Body CT Berlin) on the surface resistivity value (SIR) and electrochemical migration. Both tests passed!



Made in Germany

Halogenide-free activated FELDER electronic solder wires according to DIN EN ISO 9454-1, 1231 or 2231

(Alloys, diameters and coil sizes on request)

ISO-Core® “ELR” Low-residue no-clean SMD solder wire, specially adapted to the requirements of post-soldering work on SMD-assembled assemblies. Standard flux content 1.0 %.
Flux according to DIN EN ISO 9454-1, 2231; DIN EN 61190-1-1 / IPC J-STD-004, ORLO

ISO-Core® “ELS” Like our **ISO-Core® “ELR”**, but based on synthetic resins. Standard flux content 1.0 %.
Flux according to DIN EN ISO 9454-1, 1231; DIN EN 61190-1-1 / IPC J-STD-004, REL0

FELDER-special solder wire

(Alloys, diameters and coil sizes on request)

ISO-Core® “LASER-RA” Special low-residue solder wire for use in laser soldering systems. The flux core is highly temperature resistant and thus perfectly adapted to the demanding requirements of the laser soldering process (fast soldering cycle, high soldering temperature). Standard flux content 2.5 %.

ISO-Core® “EWL” Electronic solder wire with water-soluble flux based on organic acids, halogenide-containing activated. Especially for assemblies that are potted or painted. In contrast to conventional no-clean flux residues, the complete removal of the residues prevents interaction with the paint or casting compound. Standard flux content 2.5 %.
Flux according to DIN EN ISO 9454-1, 2123; DIN EN 61190-1-1 / IPC J-STD-004, ORM1

Application matrix - FELDER- ISO-Core® comparison of electronic solder wires

Eigenschaft	ISO-Core Clear	ISO-Core Ultra-Clear	ISO-Core RA	ISO-Core LA-SER-RA	ISO-Core EL	ISO-Core ELR	ISO-Core ELS	ISO-Core EWL
EN ISO 9454-1 / J-STD-004	1222 / REL1	1231 / REL0	1123 / ROM1	1223 / REM1	1131 / ROLO	2231 / ORLO	1231 / REL0	2123 / ORM1
Flux content (standard) %	2.2 / 3.5	1.5 / 2.2	2.5	2.5	3.5	1.0	1.0	2.5
No-Clean	•	•			•	•	•	
Lead-free	•	•	•	•	•	•	•	•
Lead-containing			•		•	•	•	•
High lead containing (> 85 %)	•		•		•			
Residues easily removable	•	•	•	•	•	•	•	•
Water washable								•
Halogenide-free		•			•	•	•	
Synthetic resins	•	•		•			•	
Hand soldering	•	•	•		•	•	•	•
Rework (Flux ≤ 1.5 %)	•	•				•	•	
Automatic soldering	•	•		•				•
Laser-soldering	•	•		•				
Water clear residues	•	•						
No flux splashes	•	•		•				

Other flux-filled FELDER solder wires

In addition to the **FELDER ISO-Core®** electronic soldering wires, we offer further special soldering wires, e.g. for soldering steel and stainless steel (**ISO-Core® “VA”**) or aluminium (**ISO-Core® “AL”**) an (further information on these soldering wires can be found on the corresponding leaflet).