ELERO, s.r.o.
Považská Teplá 28
017 05 Považská Bystrica
Slovakia

Tel.: 00421 42 4331991-2
Mobile: 00421 907 411 787
Fax/Tel.: 00421 42 4331990
E-mail: elero@elero.sk www.elero.sk

CUTTING WIRES



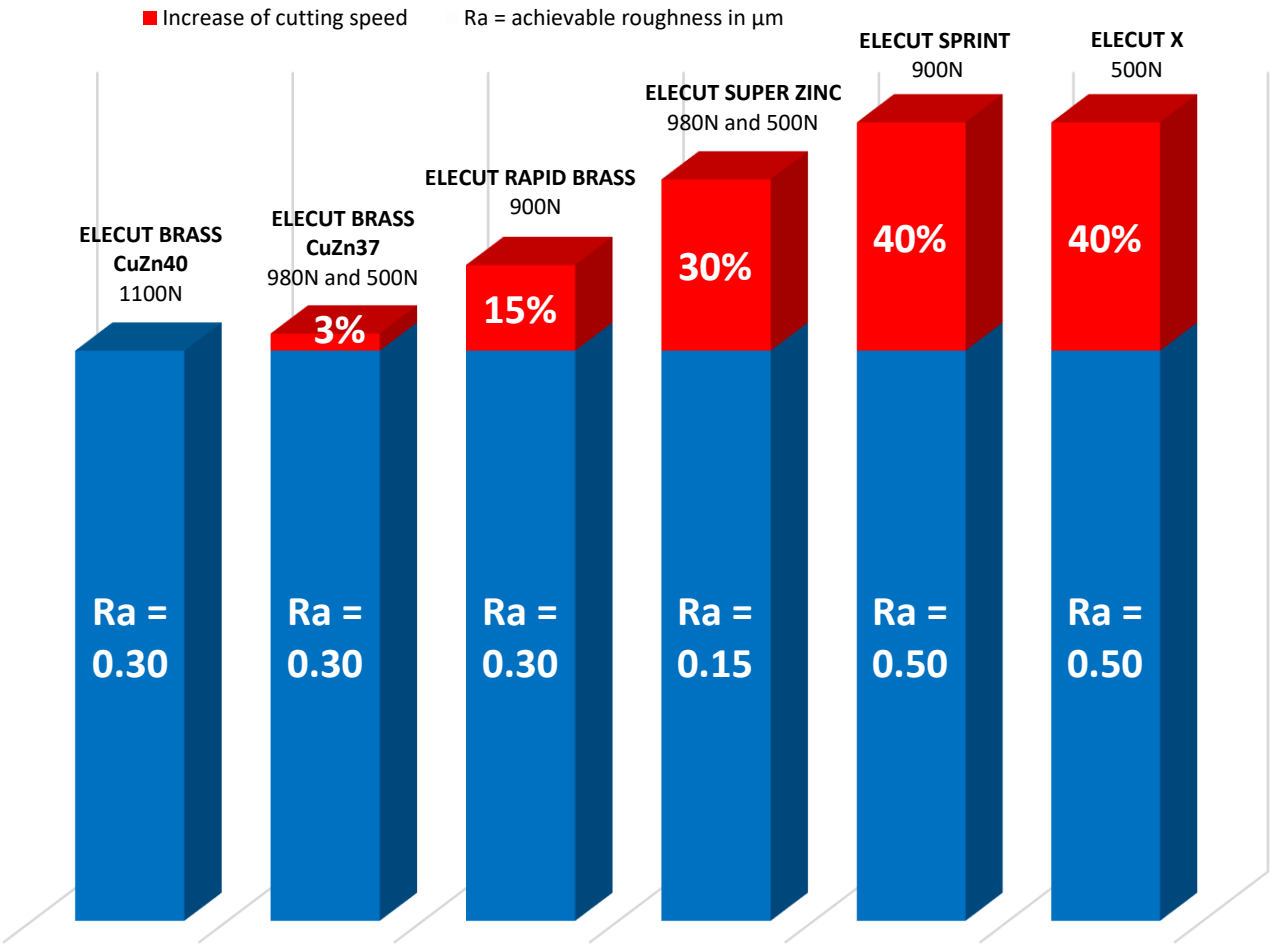
When quality isn´t costly

ELERO, s.r.o.
Považská Teplá 28
017 05 Považská Bystrica
Slovakia

Tel.: 00421 42 4331991-2
Mobile: 00421 907 411 787
Fax/Tel.: 00421 42 4331990
E-mail: elero@elero.sk www.elero.sk

Cutting wires

COMPARISON OF CUTTING SPEED AND ACHIEVABLE ROUGHNESS WITH CUTTING WIRES

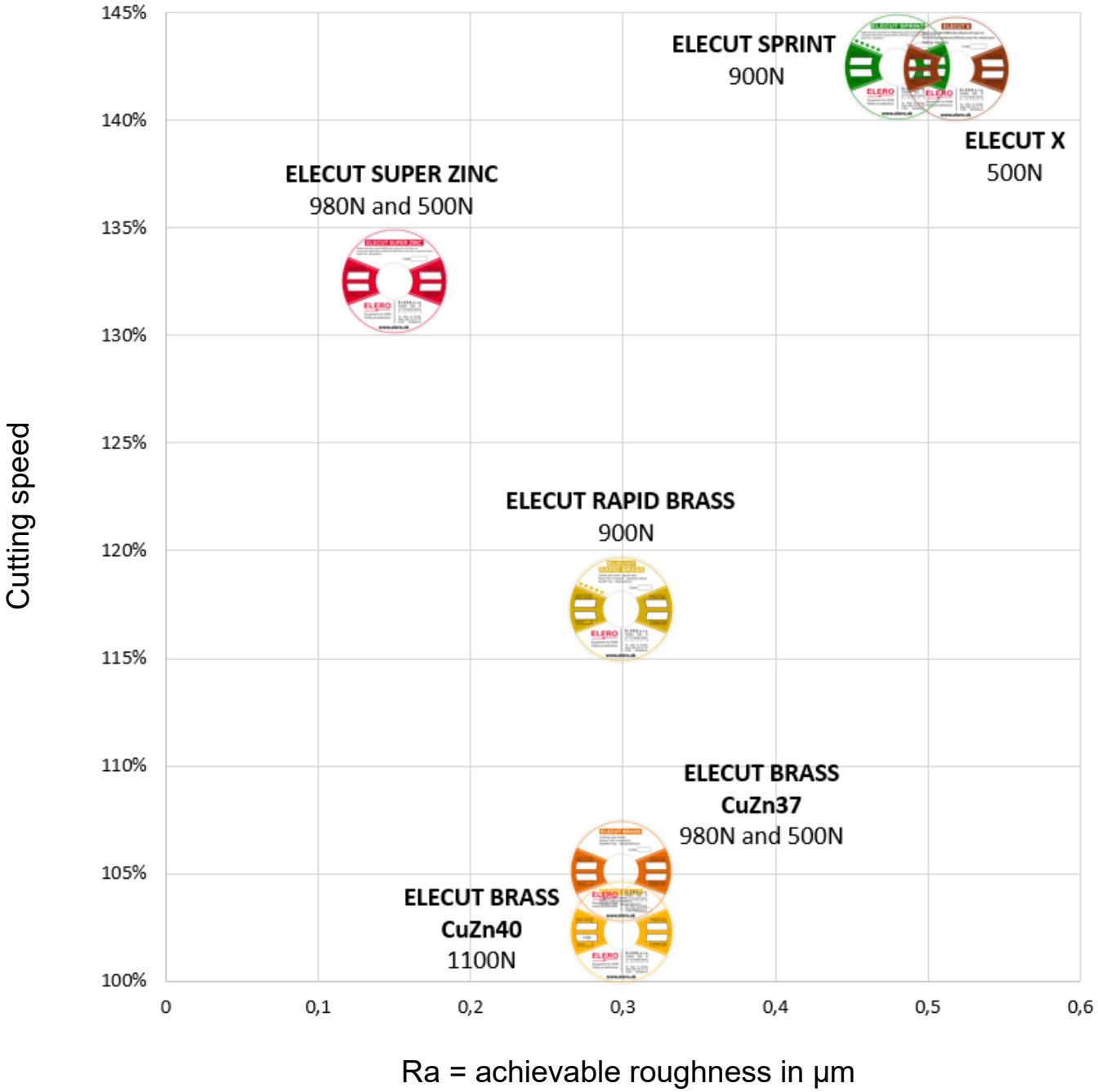


Brass cutting wire CuZn40, achievable roughness Ra = 0,30 µm	Brass cutting wire CuZn37, 3% faster than brass cutting wire CuZn40, achievable roughness Ra = 0,30 µm	Brass cutting wire - special brass alloy = up to 15% faster than brass cutting wire CuZn40, achievable roughness Ra = 0,30 µm	Multiple electrolytic coated cutting wire with brass core CuZn37 – coated by patented GAMMA PHASE technology = up to 30% faster than brass cutting wire CuZn40, achievable roughness Ra = 0,15 µm	Multiple electrolytic coated cutting wire with brass core CuZn40 – coated by patented BETA and GAMMA PHASE technology = up to 40% faster than brass cutting wire CuZn40, achievable roughness Ra = 0,50 µm	Multiple electrolytic coated cutting wire with copper core Cu coated by patented GAMMA PHASE technology = up to 40% faster than brass cutting wire CuZn40, achievable roughness Ra = 0,50 µm

ELERO, s.r.o.
Považská Teplá 28
017 05 Považská Bystrica
Slovakia

Tel.: 00421 42 4331991-2
Mobile: 00421 907 411 787
Fax/Tel.: 00421 42 4331990
E-mail: elero@elero.sk www.elero.sk

Cutting wires



Hard cutting wires with a tensile strength exceeding 800 N/mm² are suitable for straight cutting and angle cutting up to 15°.
For angle cutting over 15° it is necessary to use a soft wire with a tensile strength of 500N/mm2.

We supply also molybdenum cutting wires for extra fast EDM cutting.
Designed for less-precise, fast Chinese non-toolmaker wire cutting machines with reverse travel of cutting wire.

We look forward to specifying the most appropriate cutting wires for your needs.

ELERO, s.r.o.
Považská Teplá 28
017 05 Považská Bystrica
Slovakia

Tel.: 00421 42 4331991-2
Mobile: 00421 907 411 787
Fax/Tel.: 00421 42 4331990
E-mail: elero@elero.sk www.elero.sk

Cutting wires

Wire selection for using in specific brands of wire cutting EDM

Wires \ WEDM		Usage	+GF+ Agie Charmilles	FANUC	MITSUBISHI	Sodick	MAKINO	HITACHI	JAPAX / brother / Seibu	ONA	AccuteX / EXCETEK	SPM / CHMER
ELECUT BRASS CuZn40 1100N		**Standard speed + Achievable roughness Ra = 0,30 µm**	●	●	●	●	●	●	●	●	●	●
ELECUT BRASS CuZn37 980N and 500N		**3% higher speed + Achievable roughness Ra = 0,30 µm**	●	●	●	●	●	●	●	●	●	●
ELECUT RAPID BRASS 900N		**15% higher speed + Achievable roughness Ra = 0,30 µm**	●	●	●	●	●	●	●	●	●	●
ELECUT SUPER ZINC 980N and 500N		**30% higher speed + Achievable roughness Ra = 0,15 µm**	●	●	●	●	●	●	●	●	●	●
ELECUT SPRINT 900N		**40% higher speed + Achievable roughness Ra = 0,50 µm**	●	●	●	●	●	●	●	●	●	●
ELECUT X 500N		**40% higher speed + Achievable roughness Ra = 0,50 µm**	●	●	●	●	●	●	●	●	●	●

Hard cutting wires with a tensile strength exceeding 800 N/mm² are suitable for straight cutting and angle cutting up to 15°.
For angle cutting over 15° it is necessary to use a soft wire with a tensile strength of 500N/mm2.

We supply also molybdenum cutting wires for extra fast EDM cutting.
Designed for less-precise, fast Chinese non-toolmaker wire cutting machines with reverse travel of cutting wire.

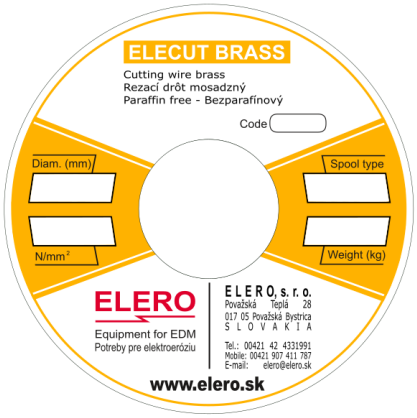
We look forward to specifying the most appropriate cutting wires for your needs.

ELERO, s.r.o.
Považská Teplá 28
017 05 Považská Bystrica
Slovakia

Tel.: 00421 42 4331991-2
Mobile: 00421 907 411 787
Fax/Tel.: 00421 42 4331990
E-mail: elero@elero.sk www.elero.sk

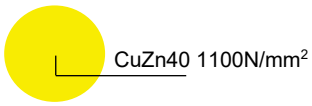
Cutting wires

ELECUT BRASS – brass cutting wire CuZn40



Hard version - for straight cutting and angle cutting up to 15°

Material: **CuZn40**
Tensile strength: **1100N/mm²**
Elongation: **2%**
Conductibility: **22% IACS**



ELECUT BRASS CuZn40 tensile strength 1100 N/mm²					
Item Number	Diameter (mm)	Tensile strength (N/mm²)	Spool type	Amount of wire on the spool (kg)	Number of spools in package
391210	0,10	1100	K125	4	1
391215	0,15	1100	K125	4	1
391625	0,15	1100	K160	8	2
391220	0,20	1100	K125	4	4
391620	0,20	1100	K160	8	2
392020	0,20	1100	K200	16	1
390520	0,20	1100	P5	5	4
391225	0,25	1100	K125	4	4
391625	0,25	1100	K160	8	2
392025	0,25	1100	K200	16	1
390525	0,25	1100	P5	5	4
391025	0,25	1100	P10	10	2
391525	0,25	1100	P15	20	1
392525	0,25	1100	K250	25	1
393525	0,25	1100	K355	45	1
391230	0,30	1100	K125	4	4
391630	0,30	1100	K160	8	2
392030	0,30	1100	K200	16	1
390530	0,30	1100	P5	5	4

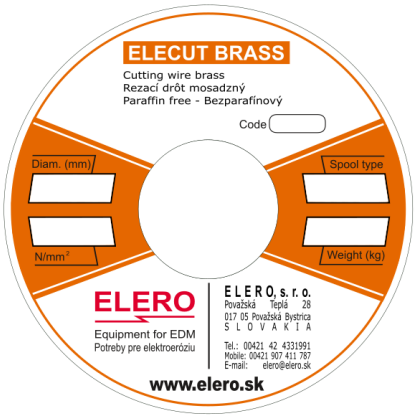
Information about delivery of other wire diameters, spool types, tensile strength, amount of wire on the spool and different composition of wire are available on request.

ELERO, s.r.o.
Považská Teplá 28
017 05 Považská Bystrica
Slovakia

Tel.: 00421 42 4331991-2
Mobile: 00421 907 411 787
Fax/Tel.: 00421 42 4331990
E-mail: elero@elero.sk www.elero.sk

Cutting wires

ELECUT BRASS – brass cutting wire CuZn37
= **3% faster** than brass cutting wire CuZn40



Hard version - for straight cutting and angle cutting up to 15°

Material: **CuZn37**
Tensile strength: **980N/mm²**
Elongation: **2%**
Conductibility: **22% IACS**

CuZn37 980N/mm²

Soft version – mostly for angle cutting over 15°

Material: **CuZn37**
Tensile strength: **500N/mm²**
Elongation: **15%**
Conductibility: **25% IACS**

CuZn37 500N/mm²

ELECUT BRASS CuZn37 tensile strength 980 N/mm²					
Item Number	Diameter (mm)	Tensile strength (N/mm²)	Spool type	Amount of wire on the spool (kg)	Number of spools in package
291210	0,10	980	K125	4	1
291215	0,15	980	K125	4	1
291615	0,15	980	K160	8	2
291220	0,20	980	K125	4	4
291620	0,20	980	K160	8	2
292020	0,20	980	K200	16	1
290520	0,20	980	P5	5	4
291225	0,25	980	K125	4	4
291625	0,25	980	K160	8	2
292025	0,25	980	K200	16	1
290525	0,25	980	P5	5	4
291025	0,25	980	P10	10	2
291525	0,25	980	P15	20	1
292525	0,25	980	K250	25	1
293525	0,25	980	K355	45	1
291230	0,30	980	K125	4	4
291630	0,30	980	K160	8	2
292030	0,30	980	K200	16	1
290530	0,30	980	P5	5	4

ELECUT BRASS CuZn37 tensile strength 500 N/mm²					
Item Number	Diameter (mm)	Tensile strength (N/mm²)	Spool type	Amount of wire on the spool (kg)	Number of spools in package
251220	0,20	500	K125	4	4
251620	0,20	500	K160	8	2
252020	0,20	500	K200	16	1
250520	0,20	500	P5	5	4
251225	0,25	500	K125	4	4
251625	0,25	500	K160	8	2
252025	0,25	500	K200	16	1
250525	0,25	500	P5	5	4
251025	0,25	500	P10	10	2
251525	0,25	500	P15	20	1
251230	0,30	500	K125	4	4
251630	0,30	500	K160	8	2
252030	0,30	500	K200	16	1
250530	0,30	500	P5	5	4

Information about delivery of other wire diameters, spool types, tensile strength, amount of wire on the spool and different composition of wire are available on request.

ELERO, s.r.o.
Považská Teplá 28
017 05 Považská Bystrica
Slovakia

Tel.: 00421 42 4331991-2
Mobile: 00421 907 411 787
Fax/Tel.: 00421 42 4331990
E-mail: elero@elero.sk www.elero.sk

Cutting wires

ELECUT RAPID BRASS – brass cutting wire, special alloy

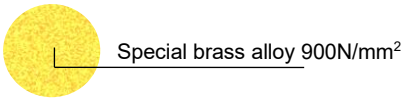
= up to **15% faster** than brass cutting wire CuZn40



Hard version – for straight cutting and angle cutting up to 15°

Equivalent: BEDRA BETTERBRASS, HITACHI HBZ-U, TURBO BRASS

Material: **Special brass alloy**
Tensile strength: **900N/mm²**
Elongation: **2%**
Conductibility: **20% IACS**



ELECUT RAPID BRASS tensile strength 900 N/mm²					
Item Number	Diameter (mm)	Tensile strength (N/mm²)	Spool type	Amount of wire on the spool (kg)	Number of spools in package
491210	0,10	900	K125	4	1
491215	0,15	900	K125	4	1
491615	0,15	900	K160	8	2
491220	0,20	900	K125	4	4
491620	0,20	900	K160	8	2
492020	0,20	900	K200	16	1
490520	0,20	900	P5	5	4
491225	0,25	900	K125	4	4
491625	0,25	900	K160	8	2
492025	0,25	900	K200	16	1
490525	0,25	900	P5	5	4
491025	0,25	900	P10	10	2
491525	0,25	900	P15	20	1
492525	0,25	900	K250	25	1
493525	0,25	900	K355	45	1
491230	0,30	900	K125	4	4
491630	0,30	900	K160	8	2
492030	0,30	900	K200	16	1
490530	0,30	900	P5	5	4

Information about delivery of other wire diameters, spool types, tensile strength, amount of wire on the spool and different composition of wire are available on request.

ELERO, s.r.o.
Považská Teplá 28
017 05 Považská Bystrica
Slovakia

Tel.: 00421 42 4331991-2
Mobile: 00421 907 411 787
Fax/Tel.: 00421 42 4331990
E-mail: elero@elero.sk www.elero.sk

Cutting wires

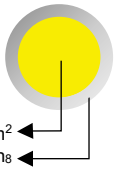
ELECUT SUPER ZINC - multiple electrolytic coated cutting wire

with brass core CuZn37 – coated by patented GAMMA PHASE technology
= up to **30% faster** than brass cutting wire CuZn40



Hard version – for straight cutting and angle cutting up to 15°

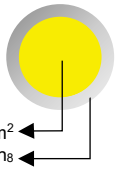
Core material: **CuZn37**
Coating: **multiple – special alloy GAMMA γ Cu_5Zn_8**
Tensile strength: **980N/mm²**
Elongation: **1%**
Conductibility: **22% IACS**



core: brass wire CuZn37 980N/mm²
coating: multiple – special alloy GAMMA γ Cu_5Zn_8

Soft version – mostly for angle cutting over 15°

Core material: **CuZn37**
Coating: **multiple – special alloy GAMMA γ Cu_5Zn_8**
Tensile strength: **500N/mm²**
Elongation: **15%**
Conductibility: **25% IACS**



core: brass wire CuZn37 500N/mm²
coating: multiple – special alloy GAMMA γ Cu_5Zn_8

ELECUT SUPER ZINC tensile strength 980 N/mm²						**ELECUT SUPER ZINC tensile strength 500 N/mm²**					
Item Number	Diameter (mm)	Tensile strength (N/mm²)	Spool type	Amount of wire on the spool (kg)	Number of spools in package	Item Number	Diameter (mm)	Tensile strength (N/mm²)	Spool type	Amount of wire on the spool (kg)	Number of spools in package
1891210	0,10	980	K125	4	1						
1891215	0,15	980	K125	4	1						
1891615	0,15	980	K160	8	2						
1891220	0,20	980	K125	4	4	1851220	0,20	500	K125	4	4
1891620	0,20	980	K160	8	2	1851620	0,20	500	K160	8	2
1892020	0,20	980	K200	16	1	1852020	0,20	500	K200	16	1
1890520	0,20	980	P5	5	4	1850520	0,20	500	P5	5	4
1891225	0,25	980	K125	4	4	1851225	0,25	500	K125	4	4
1891625	0,25	980	K160	8	2	1851625	0,25	500	K160	8	2
1892025	0,25	980	K200	16	1	1852025	0,25	500	K200	16	1
1890525	0,25	980	P5	5	4	1850525	0,25	500	P5	5	4
1891025	0,25	980	P10	10	2	1851025	0,25	500	P10	10	2
1891525	0,25	980	P15	20	1	1851525	0,25	500	P15	20	1
1892525	0,25	980	K250	25	1						
1893525	0,25	980	K355	45	1						
1891230	0,30	980	K125	4	4	1851230	0,30	500	K125	4	4
1891630	0,30	980	K160	8	2	1851630	0,30	500	K160	8	2
1892030	0,30	980	K200	16	1	1852030	0,30	500	K200	16	1
1890530	0,30	980	P5	5	4	1850530	0,30	500	P5	5	4

Information about delivery of other wire diameters, spool types, tensile strength, amount of wire on the spool are available on request.

ELERO, s.r.o.
Považská Teplá 28
017 05 Považská Bystrica
Slovakia

Tel.: 00421 42 4331991-2
Mobile: 00421 907 411 787
Fax/Tel.: 00421 42 4331990
E-mail: elero@elero.sk www.elero.sk

Cutting wires

ELECUT SPRINT - multiple electrolytic coated cutting wire

with brass core CuZn40 – coated by patented BETA and GAMMA PHASE technology
= up to **40% faster** than brass cutting wire CuZn40



Hard version – for straight cutting and angle cutting up to 15°

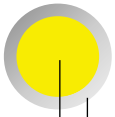
Core material: **CuZn40**

Coating: **multiple – special alloy BETA β CuZn and GAMA γ Cu_5Zn_8**

Tensile strength: **900N/mm²**

Elongation: **1%**

Conductibility: **23% IACS**



core: brass wire CuZn40 900N/mm²
coating: multiple – special alloy BETA β CuZn a GAMA γ Cu_5Zn_8

ELECUT SPRINT tensile strength 900 N/mm²					
Item Number	Diameter (mm)	Tensile strength (N/mm²)	Spool type	Amount of wire on the spool (kg)	Number of spools in package
1291210	0,10	900	K125	4	1
1291215	0,15	900	K125	4	1
1291615	0,15	900	K160	8	2
1291220	0,20	900	K125	4	4
1291620	0,20	900	K160	8	2
1292020	0,20	900	K200	16	1
1290520	0,20	900	P5	5	4
1291225	0,25	900	K125	4	4
1291625	0,25	900	K160	8	2
1292025	0,25	900	K200	16	1
1290525	0,25	900	P5	5	4
1291025	0,25	900	P10	10	2
1291525	0,25	900	P15	20	1
1292525	0,25	900	K250	25	1
1293525	0,25	900	K355	45	1
1291230	0,30	900	K125	4	4
1291630	0,30	900	K160	8	2
1292030	0,30	900	K200	16	1
1290530	0,30	900	P5	5	4

Information about delivery of other wire diameters, spool types, tensile strength, amount of wire on the spool are available on request.

ELERO, s.r.o.
Považská Teplá 28
017 05 Považská Bystrica
Slovakia

Tel.: 00421 42 4331991-2
Mobile: 00421 907 411 787
Fax/Tel.: 00421 42 4331990
E-mail: elero@elero.sk www.elero.sk

Cutting wires

ELECUT X - multiple electrolytic coated cutting wire with copper core Cu

coated by patented GAMMA PHASE technology
= up to **40% faster** than brass cutting wire CuZn40



Soft version – mostly for angle cutting over 15°

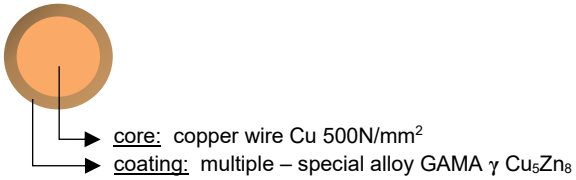
Core material: **Cu**

Coating: **multiple - special alloy GAMA γ Cu_5Zn_8**

Tensile strength: **500N/mm²**

Elongation: **2%**

Conductibility: **65% IACS**



ELECUT X tensile strength 500 N/mm²					
Item Number	Diameter (mm)	Tensile strength (N/mm²)	Spool type	Amount of wire on the spool (kg)	Number of spools in package
1951220	0,20	500	K125	4	4
1951620	0,20	500	K160	8	2
1952020	0,20	500	K200	16	1
1950520	0,20	500	P5	5	4
1951225	0,25	500	K125	4	4
1951625	0,25	500	K160	8	2
1952025	0,25	500	K200	16	1
1950525	0,25	500	P5	5	4
1951025	0,25	500	P10	10	2
1951525	0,25	500	P15	20	1
1951230	0,30	500	K125	4	4
1951630	0,30	500	K160	8	2
1952030	0,30	500	K200	16	1
1950530	0,30	500	P5	5	4

Information about delivery of other wire diameters, spool types, tensile strength, amount of wire on the spool are available on request.

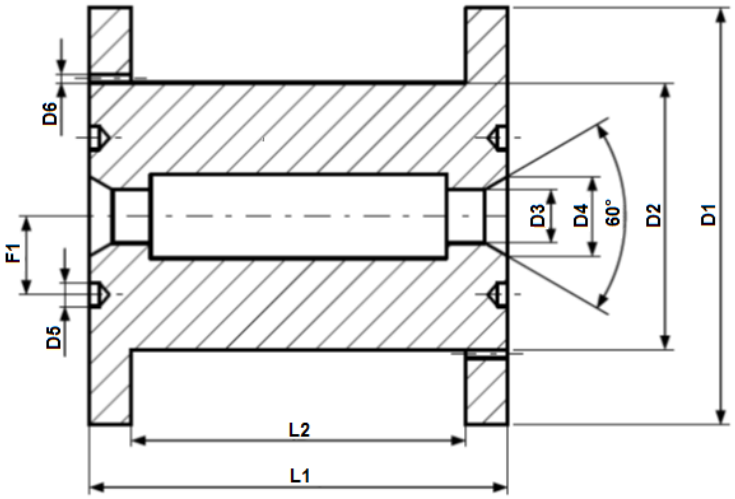
ELERO, s.r.o.
Považská Teplá 28
017 05 Považská Bystrica
Slovakia

Tel.: 00421 42 4331991-2
Mobile: 00421 907 411 787
Fax/Tel.: 00421 42 4331990
E-mail: elero@elero.sk www.elero.sk

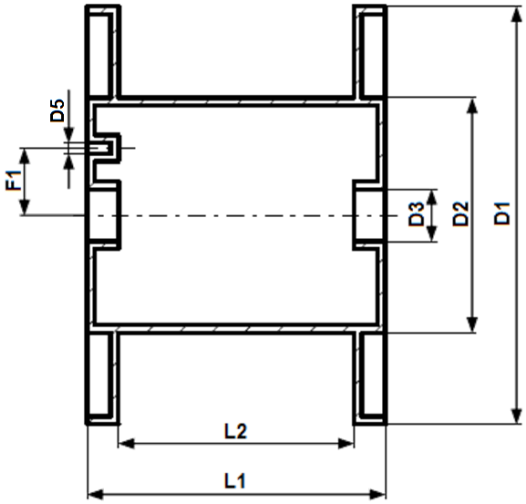
Cutting wires

Basic spools types

Spool type K (DIN)



Spool type P



Units: mm

Spool type	D1	D2	D3	D4	D5	D6	F1	L1	L2	Weight of wire
K100 (DIN100)	100	63	16	-	-	-	-	100	80	1,6 kg
K125 (DIN125)	125	80	16	24	7	3	20	125	100	4 kg
K160 (DIN160)	160	100	22	34	13	3	32	160	128	8 kg
K200 (DIN200)	200	125	22	34	13	3	32	200	160	16 kg
K250 (DIN250)	250	160	22	-	-	-	-	200	160	25 kg
K355 (DIN355)	355	224	36	-	-	-	-	200	160	45 kg
P3	130	81	20	-	-	-	-	110	90	3 kg
P5	160	90	20	-	-	-	-	115	90	5 kg
P10	200	90	25	-	-	-	-	134	110	10 kg
P15	250	110	34	-	-	-	-	140	110	20 kg

We look forward to specifying the most appropriate cutting wires for your needs.

ELERO, s.r.o.
Považská Teplá 28
017 05 Považská Bystrica
Slovakia

Tel.: 00421 42 4331991-2
Mobile: 00421 907 411 787
Fax/Tel.: 00421 42 4331990
E-mail: elero@elero.sk www.elero.sk

Cutting wires

Wire tension meters

Item No.: 1003 Wire tension meter with pointer



Portable wire tension meter with pointer

- For EDM wire cutters
  Measuring range: 100-3000g (cN)