



High voltage transformers



Low voltage transformers



Product catalogue Electrical Machines

Elpress crimp system for transformer manufacturing





Environment policy

Within ELPRESS AB we shall always work with ongoing improvements reducing our influence on the environment. This shall be achieved by using resources in an environment promoting way and by reducing the amount of emissions and waste. We shall meet the legal requirements with a good margin. Our products shall be designed to minimise environmental influence related to

- Manufacture
- Use, and
- Final disposal

All ingredients, materials and components with a negative environment influence shall gradually be exchanged. Our processes as well as our places and methods of work shall be designed and adapted in order to minimise environmental influence and to avoid injury and health hazard to persons.

Information and training shall constitute normal activities in the company to stimulate interest in environment issues with all ELPRESS' employees and to support personal development and participation in the environment work of the company.

Our suppliers and commissioned partners shall be chosen and influenced in such a way that they can add to our fulfilment of the environment policy.

Our customers shall be informed of our environment work and form co-operation partners to spread knowledge and advice to the parties of the distribution chain, all in order to safeguard the proper use, stocking and final disposal of our products.

We shall continuously evaluate the results of the environment work.

We shall demonstrate openness concerning information on our work and our effect on the environment.

Quality

Good quality forms the basis for development with high productivity and competitiveness. Our quality concept addresses our customers, our suppliers and ourselves. With quality we understand our ability to meet internal as well as external customer requirements and expectations regarding the use our products and services.

Quality declaration

Our overall quality target shall be to surpass the quality in products and services offered to the market by our competitors. Our attitude shall be characterized by ongoing improvements, with the ambition also to be regarded a natural partner in relevant quality work. Each and every employee of Elpress AB shall give priority the responsibility for quality in his/her daily work. All work regarding quality improvements is supported by the company management.

As a means to fulfil this quality declaration, the requirements of the quality standard ISO 9001 shall be applied as a general standard for the quality work within Elpress AB.





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 The information listed is approximate and is presented only as a guide for product selection.
 We make no claims or warranties for the suitability of any product for any particular application.*



Introduction

Advanced crimping makes reliability, high performance and documentation essential

When crimping in advanced applications as transformers it is essential that the crimping system is a high performance and reliable system. Elpress has developed a wide range of products specialized for these applications. Together with training of operators, certifications and the products this is a complete system concept.

Elpress Crimp System for **Transformer Connections** is:

- Terminals and connectors adapted to transformer use
- Electrically powered crimp tools with ergonomic crimp heads, rounding and crimp dies
- Test certification to international standards
- Production quality procedures
- Training and certifying of operators



Terminals and connectors

Elpress complete system consists of winding terminals and connectors from 35 to 630 mm². They have the suffix L that is the customers' guarantee that the connector is a part of the quality assured system.

Special items have been developed, like the straight and angled T-connectors. Markings on the terminals and connectors show tool identification, size, stud hole and manufacturers emblem. The markings are made for easier and correct use.

Tools

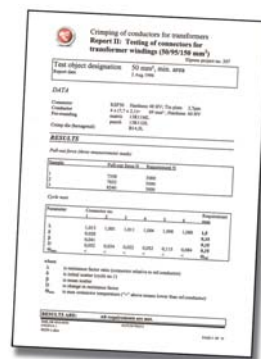
With the 13 and 25 tons crimp heads Elpress ensures easy operation both when rounding of winding bundles and when crimping. Elpress offers a mains and/or battery operated hydraulic pump that is thumb-operated hydraulic pump that is thumb-controlled from the crimping head handle and powers the crimping head.

Rounding and crimping dies are polished for minimising the risk of sharp edges. Winding connections are crimped within the following acceptance range for each connection.

Nom. connector area mm ²	Tot. initial real winding conductor cross section	
	min mm ²	max mm ²
25	30	47
35	45	70
50	69	103
70	100	120
95	113	161
120	145	185
150	180	220
185	220	265
240	302	343
300	340	400
400	412	500
500	500	580
630	630	730

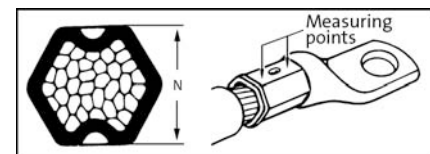
Tests

Elpress has tested the use of terminals and connectors within the specified cross section area ranges in accordance with IEC61238:1. This is the most widely accepted test standard with a qualified evaluation of performance stability. Test reports are available from Elpress and can be requested if needed.



Production Quality Assurance

It is essential to have simple means of identifying correct crimp procedures and results while working. With the Elpress System the dies leave an imprint on the crimped barrel surface showing the die identification. This enables a direct and easy inspection if proper tools have been used. For all crimps a crimp height limit is given to make an easy check of proper tool function by means of a vernier calliper or a gauge.



Operator training

To ensure that operators have the detailed know-how that is the base for long term quality, Elpress runs theoretical and practical training sessions at each production site resulting in certification of the individual operators. These trained operators will have a qualified level in regard to practical work procedures as well as the precautions that ensure proper results.



Assured results

When you work with the Elpress Crimp System for Transformer Conductor Connections, and follow the instructions for this system, you get results which have been tested to well established standards and requirements. This is your way of getting assured results in production work.



Markings on Cu-connections

Elpress marking system for Cu-connectors shows logotype, conductor area and ID-number for crimp die to be used. This system enables final inspection of proper die use as the die number is automatically imprinted by the die on the crimped barrel, see picture above.

Stud holes in terminal palms

Screw-dimension	Hole diameter tolerance H13 (Ø mm)
M 3	3,2
M 4	4,3
M 5	5,3
M 6	6,4
M 8	8,4
M 10	10,5
M 12	13
M 16	17
M 20	21
M 24	25



Marking of tube terminals

- 32** (on the terminal neck)
- ID-no. for the hexagonal die
- (Elpress logo) 300-16F** (on the palm)
- 300 = Cu-conductor area, mm²
- 16 = hole for screw M16
- F = KRF



Marking of connectors

- (Elpress logo) 27**
- ID-no. for hexagonal die
- 185 F**
- 185 = Cu-conductor area, mm²
- F = KSF



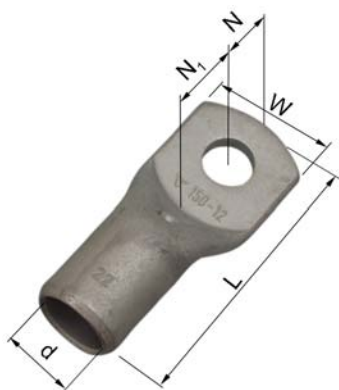
Cu-terminals

Tube terminals 25 - 630 mm², KRF-L

- Data: electrolytic copper, tin plated, cable inspection hole, for flexible and stranded Cu-conductors and winding conductors.

Marking example KRF: 70 10F, (Elpress logotype included) 17

70 = mm² 10 = palm hole for M10 F = type KRF, for stranded and flexible conductors 17 = Die No.



area	Winding mm ²	Cat. no. mm ² - bolt hole M	W	d	N	N ₁	L	Pcs/pack	Die no.
25	30-47	KRF25-6L	16	8	8	10	39	100	11L
		KRF25-8L	16	8	8	10	39	100	11L
		KRF25-10L	16	8	8	10	39	100	11L
		KRF25-12L	22	8	12	13	47	100	11L
35	45-70	KRF35-6L	18	9	10	11	47	100	13L
		KRF35-8L	18	9	10	11	47	100	13L
		KRF35-10L	18	9	10	11	47	100	13L
		KRF35-12L	22	9	12	14	52	100	13L
50	69-103	KRF50-8L	21	11	11	12	50	100	14,5L
		KRF50-10L	21	11	11	12	50	100	14,5L
		KRF50-12L	21	11	12	14	53	100	14,5L
		KRF50-16L	27	11	15	17	59	100	14,5L
70	100-120	KRF70-8L	25	13	11	11	55	50	17L
		KRF70-10L	25	13	11	12	55	50	17L
		KRF70-12L	25	13	12	14	58	50	17L
		KRF70-16L	28	13	15	17	64	50	17L
95	113-161	KRF95-8L	29	15	15	17	69	50	20L
		KRF95-10L	29	15	15	17	69	50	20L
		KRF95-12L	29	15	15	17	69	50	20L
		KRF95-16L	29	15	15	17	69	50	20L
120	145-185	KRF120-8L	32	17	15	16	73	25	22L
		KRF120-10L	32	17	15	17	73	25	22L
		KRF120-12L	32	17	15	17	73	25	22L
		KRF120-16L	32	17	15	17	73	25	22L
150	180-220	KRF150-00L	36	19	32*	-	80	25	25L
		KRF150-8L	36	19	15	17	80	25	25L
		KRF150-10L	36	19	15	17	80	25	25L
		KRF150-12L	36	19	15	17	80	25	25L
		KRF150-16L	36	19	15	17	80	25	25L
185	220-265	KRF185-10L	39	21	15	17	86	20	27L
		KRF185-12L	39	21	15	17	86	20	27L
		KRF185-16L	39	21	15	17	86	20	27L
		KRF185-20L	39	21	19	19	93	20	27L
240	302-343	KRF240-00L	44	24	39*	-	95	10	30L
		KRF240-10L	44	24	19	20	95	10	30L
		KRF240-12L	44	24	19	20	95	10	30L
		KRF240-16L	44	24	19	20	95	10	30L
300	340-400	KRF300A-00L	45	24,5	54*	-	116	10	32L
		KRF300A-10L	45	24,5	22	32	116	10	32L
		KRF300A-12L	45	24,5	22	32	116	10	32L
		KRF300A-16L	45	24,5	22	32	116	10	32L
400	412-500	KRF400A-00L	56	30	55*	-	125	10	38L
		KRF400A-10L	56	30	22	33	125	10	38L
		KRF400A-12L	56	30	22	33	125	10	38L
		KRF400A-16L	56	30	22	33	125	10	38L
500	500-580	KRF500-16L	61	33	25	35	150	5	42L
		KRF500-20L	61	33	25	35	150	5	42L
630	630-730	KRF630-20L	73	39	25	25	165	5	50L

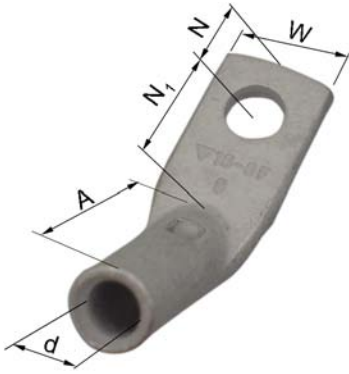
* total palm length

Tube terminals 45°, 50 - 400 mm², KRF-L

■ Data: electrolytic copper, tin plated, cable inspection hole, for flexible and stranded Cu-conductors and winding conductors.

Marking example KRF: 50 10F (Elpress logotype included) 14,5

50 = mm² 10 = palm hole for M10 F = type KRF, for stranded and flexible conductors 14,5 = Die No.



Flexible stranded mm ²	Winding mm ²	Cat. no.	mm W	d	N	N ₁	A	Pcs/pack	Die no.
50	69-103	KRF50-8L-45GR	21	11	8,5	17,5	31	100	14,5L
		KRF50-10L-45GR	21	11	11,5	18,5	31	100	14,5L
		KRF50-12L-45GR	21	11	12,5	19,5	31	100	14,5L
70	100-120	KRF70-10L-45GR	25	13	11,5	18,5	35	50	17L
		KRF70-12L-45GR	25	13	12,5	19,5	35	50	17L
95	113-161	KRF95-10L-45GR	29	15	11,5	18,5	40	50	20L
		KRF95-12L-45GR	29	15	12,5	19,5	40	50	20L
120	145-85	KRF120-10L-45GR	32	17	11,5	18,5	43	25	22L
		KRF120-12L-45GR	32	17	12,5	19,5	43	25	22L
150	180-220	KRF150-10L-45GR	36	19	11,5	18,5	49	25	25L
		KRF150-12L-45GR	36	19	12,5	19,5	49	25	25L
185	220-265	KRF185-10L-45GR	39	21	11,5	18,5	55	20	27L
		KRF185-12L-45GR	39	21	12,5	19,5	55	20	27L
240	302-343	KRF240-10L-45GR	44	24	11,5	18,5	57	10	30L
		KRF240-12L-45GR	44	24	12,5	19,5	57	10	30L
300	340-400	KRF300A-12L-45GR	46	24,5	22	32	65	10	32L
		KRF300A-16L-45GR	46	24,5	22	32	65	25	32L
400	412-500	KRF400A-12L-45GR	56	30	22	33	74	10	38L
		KRF400A-16L-45GR	56	30	22	33	74	10	38L



Cu-terminals

Tube terminals 90°, 35 - 630 mm², KRF-L

■ Data: electrolytic copper, tin plated, cable inspection hole, for flexible and stranded Cu-conductors and winding conductors.

Marking example KRF: 70 10F (Elpress logotype included) 17

70 = mm² 10 = palm hole for M10 F = type KRF, for stranded and flexible conductors 17 = Die No.



Measurement for KRF500-12x2-44,5L-90GR and KRF630-12x2-44,5L-90GR.

Flexible stranded mm ²	Winding mm ²	Cat. no. mm ² , bolt	mm W	d	N	N ₁	A	Pcs/pack	Die no.
35	45-70	KRF35-8L-90GR	18	9	8,5	12	22,5	100	13L
50	69-103	KRF50-8L-90GR	21	11	8,5	17,5	31	100	14,5L
		KRF50-10L-90GR	21	11	11,5	18,5	31	100	14,5L
		KRF50-12L-90GR	21	11	12,5	19,5	31	100	14,5L
70	100-120	KRF70-8L-90GR	25	13	8,5	17,5	31,5	50	17L
		KRF70-10L-90GR	25	13	11,5	18,5	31,5	50	17L
		KRF70-12L-90GR	25	13	12,5	19,5	31,5	50	17L
95	113-161	KRF95-8L-90GR	29	15	15,5	17,5	32,5	50	20L
		KRF95-10L-90GR	29	15	11,5	18,5	32,5	50	20L
		KRF95-12L-90GR	29	15	12,5	19,5	32,5	50	20L
		KRF95-16L-90GR	29	15	15,5	20,5	32,5	50	20L
120	145-185	KRF120-10L-90GR	32	17	11,5	18,5	34,5	25	22L
		KRF120-12L-90GR	32	17	12,5	19,5	34,5	25	22L
		KRF120-16L-90GR	32	17	15,5	20,5	34,5	25	22L
150	180-220	KRF150-10L-90GR	36	19	11,5	18,5	49	25	25L
		KRF150-12L-90GR	36	19	12,5	19,5	49	25	25L
		KRF150-16L-90GR	36	19	15,5	20,5	49	25	25L
185	220-265	KRF185-10L-90GR	39	21	11,5	19,5	42,5	20	27L
		KRF185-12L-90GR	39	21	12,5	19,5	42,5	20	27L
240	302-343	KRF240-10L-90GR	44	24	19	19	52	15	30L
		KRF240-12L-90GR	44	24	19	24	52	15	30L
300	340-400	KRF300A-12L-90GR	46	24,5	22	32	65	10	32L
		KRF300A-16L-90GR	46	24,5	22	32	65	10	32L
400	412-500	KRF400A-16L-90GR	56	30	33	22	70	10	38L
500	500-580	KRF500-12x2-44,5L-90GR	61	33	12	18,5	95*	4	42L
630	630-730	KRF630-12x2-44,5L-90GR	73	39	15	23,5	115*	1	50L

* +/- 3 mm

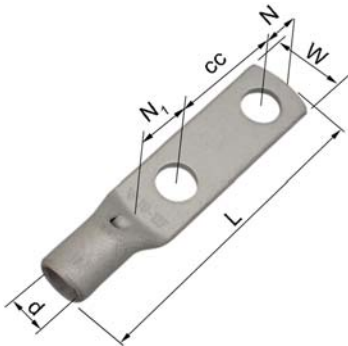


Tube terminals with two stud holes 50 - 500 mm², KRF-L

■ Data: electrolytic copper, tin plated, cable inspection hole, for flexible and stranded Cu-conductors and winding conductors.

Marking example KRF: 70 10F (Elpress logotype included) 17

70 = mm² 10 = palm hole for M10 F = type KRF, for flexible and stranded conductors 17 = Die No.



Flexible stranded mm ²	Winding mm ²	Cat. no. mm ² , bolt hole, cc-measure	mm W	d	N	N ₁	L	Pcs/ pack	Die no.
50	69-103	KRF50-10x2-24-26L	21	11	11	22	87	50	14,5L
		KRF50-12x2-44,5L	21	11	12	18,5	105	25	14,5L
70	100-120	KRF70-10x2-24-26L	25	13	11	12,0	55	50	17L
		KRF70-12x2-44,5L	25	13	12	18	103	25	17L
95	113-161	KRF95-10x2-24-26L	29	15	11	22	95	25	20L
		KRF95-12x2-44,5L	29	15	12	18,5	112	25	20L
120	145-185	KRF120-10x2-24-26L	32	17	15	17	73	25	22L
		KRF120-12x2-44,5L	32	17	12	19	113	25	22L
150	180-220	KRF150-10x2-24-26L	36	19	11	22	106	25	25L
		KRF150-12x2-44,5L	36	19	12	19,5	124	25	25L
185	220-265	KRF185-10x2-24-26L	39	21	15	17	86	20	27L
		KRF185-12x2-44,5L	39	21	12	20	130	10	27L
240	302-343	KRF240-10x2-24-26L	44	24	11	22	114	10	30L
		KRF240-12x2-44,5L	44	24	12	19,5	132	10	30L
300	340-400	KRF300A-12x2-44,5L	45	24,5	12	20,5	139	10	32L
400	412-500	KRF400A-12x2-44,5L	56	30	12	20,5	147	8	38L
500	500-580	KRF500-12x2-44,5L	61	33	12	18,5	165	8	42L

Flexible stranded mm ²	Winding mm ²	Cat. no. mm ² , bolt hole, cc-measure	mm W	d	N	N ₁	L	Pcs/ Pack	Die no.
150	180-220	KRF150-12x2-40L	36	19	12	19	120	20	25L
185	220-265	KRF185-12x2-40L	39	21	12	20	126	20	27L
240	302-343	KRF240-12x2-40L	44	24	12	21	129	10	30L
300	340-400	KRF300A-12x2-40L	45	24,5	12	22	136	10	32L
400	412-500	KRF400A-12x2-40L	56	30	12	23	145	8	38L



Cu-terminals

Through connectors 25 - 630 mm², KSF-L

- Data: electrolytic copper, tin plated, cable inspection hole and cable stop, for flexible and stranded Cu-conductors and winding conductors.

Marking example: 17 70F (earth-sign) Elpress logotype included

17 = die no. 70 = mm² F = type KSF, stranded and flexible conductors



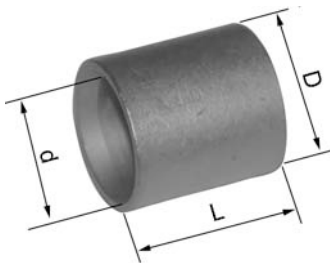
Flexible stranded mm ²	Winding mm ²	Cat. no. mm ²	mm d	D	L	Pcs/pack	Die no.
25	30-47	KSF25L	8	11	35	100	11L
35	45-70	KSF35L	9,0	13,0	35	100	13L
50	69-103	KSF50L	11	14,5	45	50	14,5L
70	100-120	KSF70L	13	17	45	50	17L
95	113-161	KSF95L	15	20	45	50	20L
120	145-185	KSF120L	17	22	55	50	22L
150	180-220	KSF150L	19	25	65	25	25L
185	220-265	KSF185L	21	27	70	25	27L
240	302-343	KSF240L	24	30	70	25	30L
300	340-400	KSF300A-L	24,5	31,5	75	10	32L
400	412-500	KSF400A-L	30	38	108	10	38L
500	500-580	KSF500L	33	42	135	5	42L
630	630-730	KSF630L	39	50	170	5	50L

Parallel through connectors 25 - 630 mm², KS-P

- Data: electrolytic copper, tin plated, for flexible and stranded Cu-conductors.

Marking example: 17 70 (earth-sign) Elpress logotype included

17 = die no. 70 = mm²



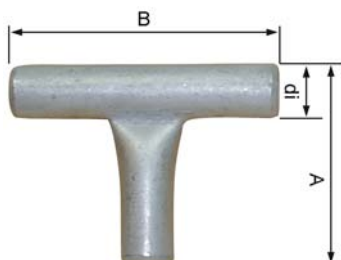
Flexible stranded mm ²	Winding mm ²	Cat. no. mm ²	mm d	D	L	Pcs/pack	Die no.
25	30-47	KS25P	8	11	14	100	11L
35	45-70	KS35P	9	13	16	100	13L
50	69-103	KS50P	11	14,5	18	100	14,5L
70	100-120	KS70P	13	17	18	100	17L
95	113-161	KS95P	15	20	20	100	20L
120	145-185	KS120P	17	22	26	50	22L
150	180-220	KS150P	19	25	26	50	25L
185	220-265	KS185P	21	27	28	25	27L
240	302-343	KS240P	24	30	30	25	30L
300	340-400	KS300P	26	32	35	10	32L
400	412-500	KS400P	30	38	50	10	38L
500	500-580	KS500P	33	42	52	10	42L
630	630-730	KS630P	39	50	62	10	50L

T-connectors 35 - 630 mm², KTSF

- Data: electrolytic copper, tin plated, cable inspection hole, for flexible and stranded Cu-conductors and winding conductors.

Marking example: 14,5 3x50F Elpress logotype included

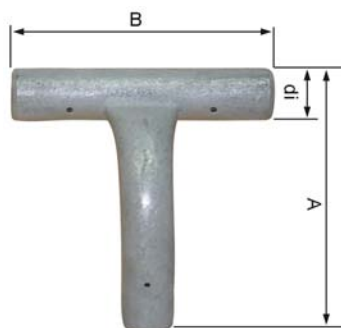
14,5 = die no. 3x = no. of conductor entries 50 = mm² F = type KSF, stranded and flexible conductors



Flexibel stranded mm ²	Winding mm ²	Cat. no.	di	A	B	Marking	Pcs/pack	Die no.
35	45-70	KTSF35	9	63	87	13 3 x 35F	20	13L
50	69-103	KTSF50	11	70	96	14,5 3 x 50F	20	14,5L
70	100-120	KTSF70	13	74	100	17 3 x 70F	6	17L
95	113-161	KTSF95	15	77	103	20 3 x 95F	6	20L
120	145-185	KTSF120	17	87,5	120	22 3 x 120F	6	22L
150	180-220	KTSF150	19	92	124	25 3 x 150F	6	25L
185	220-265	KTSF185	21	96	124	27 3 x 185F	6	27L
240	302-343	KTSF240	24	100	129	30 3 x 240F	4	30L
300	340-400	KTSF300A	24,5	101,5	130	32 3 x 300F	4	32L
400	412-500	KTSF400A	30	131,5	190	38 3 x 400F	2	38L
500	500-590	KTSF500	33	134,5	200	42 3 x 500F	2	42L
630	630-730	KTSF630L	39	168	235	50 3 x 630F	2	50L

T-connectors 50 - 240 mm², 110GR, KTSF

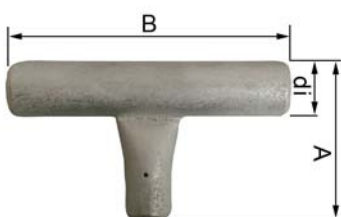
- Data: electrolytic copper, tin plated, cable inspection hole, for flexible and stranded Cu-conductors and winding conductors.



Flexible stranded mm ²	Winding mm ²	Cat. no.	di	A	B	Marking	Pcs/pack	Die no.
50	69-103	KTSF50-110GR	11	66	96	14,5 3 x 50F	20	14,5L
95	113-161	KTSF95-110GR	15	84,5	103	20 3 x 95F	6	20L
120	145-185	KTSF120-110GR	17	91	120	22 3 x 120F	6	22L
150	180-220	KTSF150-110GR	19	104	124	25 3 x 150F	4	25L
185	220-265	KTSF185-110GR	21	112	124	27 3 x 185F	2	27L
240	302-343	KTSF240-110GR	24	116	129	30 3 x 240F	2	30L

T-connectors with different area 150 - 400 mm², KTSF

- Data: electrolytic copper, tin plated, cable inspection hole, for flexible and stranded Cu-conductors and winding conductors.



Flexible stranded mm ²	Winding mm ²	Cat. no.	di	A	B	Marking	Pcs/pack	Die no.
150	180-220/ 69-103	KTSF150-50	19	80	124	25 2 x 150F 14,5 1 x 50F	10	25L 14,5L
150	180-220/ 113-161	KTSF150-95	19	83	124	25 2 x 150F 20 1 x 95F	10	25L 20L
240	302-343/ 69-103	KTSF240-50	24	85	129	30 2 x 240F 14,5 1 x 50F	6	30L 14,5L
240	302-343/ 113-161	KTSF240-95	24	88	129	30 2 x 240F 20 1 x 95F	6	30L 20L
240	302-343/ 180-220	KTSF240-150	24	97	129	30 2 x 240F 25 1 x 150F	6	30L 25L
300	340-400/ 180-220	KTSF300A-150	24,5	97,5	130	32 2 x 300F 25 1 x 150F	5	32L 25L
400	412-500/ 340-400	KTSF400A-300A	30	108	190	38 2 x 400F 32 1 x 300F	4	38L 32L



Lead through terminals 50 - 240 mm², D20 and D32

- Data: electrolytic copper, tin plated, cable inspection hole, for flexible and stranded Cu-conductors and winding conductors.

Marking example: 14,5 50F Elpress logotype included

14,5 = die no. 50 = mm² F = type KSF, stranded and flexible conductors



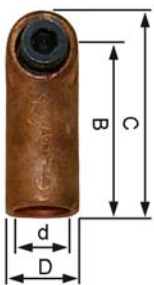
Flexible stranded mm ²	Winding mm ²	Cat. no.	D	d	A	L	Marking	Pcs/pack	Die no.
50	69-103	KGF50-D20	14,5	11	25	120	14,5-50F	25	14,5L
		KGF50-D32	14,5	11	25	105	14,5-50F	10	14,5L
95	113-161	KGF95-D20	20	15	28	120	20-95F	20	20L
		KGF95-D32	20	15	28	105	20-95F	28	20L
150	180-220	KGF150-D32	25	19	35	105	25-150F	10	25L
240	302-343	KGF240-D32	30	24	35	105	30-240F	10	30L

Terminals for tap changers 50 - 150 mm²

- Data: electrolytic copper, tin plated, cable inspection hole, for flexible and stranded Cu-conductors and winding conductors.

Marking example: 14,5 50F Elpress logotype included

14,5 = die no. 50 = mm² F = type KSF, stranded and flexible conductors



Flexible stranded mm ²	Winding mm ²	Cat. no.	d	D	B	C	Marking	Pcs/Pack	Die no.
50	69-103	KLF50-M10	11	14,5	45	59	14,5-50F	24	14,5L
95	113-161	KLF95-M10	15	20	46	60	20-95F	24	20L
150	180-220	KLF150-M10	19	25	54	68	25-150F	24	25L

Through connectors with different area 50 - 630 mm², KSF-L

■ Data: electrolytic copper, tin plated, cable inspection hole, for flexible and stranded Cu-conductors and winding conductors.

Marking example: 17-70F Elpress logotype included

17 / 14,5 = Die No. 70, 50 = mm² F = type KSF, stranded and flexible conductors



Flexible stranded mm ²	Winding mm ²	Cat no.	D	d	L ₁	D ₁	d ₁	L ₂	L	Pcs/ pack	Die no.
50-25	69-103/30-47	KSF50-25L	14,5	11	20	11	8	16	38	100	14,5L, 11L
50-35	69-103/45-70	KSF50-35L	14,5	11	24	13	9	25	55	100	14,5L, 13L
70-35	100-120/45-70	KSF70-35L	17	13	24	13	9	25	60	50	17L, 13L
70-50	100-120/69-103	KSF70-50L	17	13	24	14,5	11	20	50	25	17L, 14,5L
95-35	113-161/45-70	KSF95-35L	20	15	25	13	9	25	60	50	20L, 13L
95-50	113-161/69-103	KSF95-50L	20	15	25	14,5	11	20	55	25	20L, 14,5L
95-70	113-161/100-120	KSF95-70L	20	15	25	17	13	25	60	24	20L, 17L
120-35	145-185/45-70	KSF120-35L	22	17	31	13	9	25	65	50	22L, 13L
120-50	145-185/69-103	KSF120-50L	22	17	31	14,5	11	20	60	50	22L, 14,5L
120-70	145-185/100-120	KSF120-70L	22	17	31	17	13	25	65	24	22L, 17L
120-95	145-185/113-161	KSF120-95L	22	17	31	20	15	31	70	25	22L, 20L
150-35	180-220/45-70	KSF150-35L	25	19	31	13	9	25	65	25	25L, 13L
150-50	180-220/69-103	KSF150-50L	25	19	31	14,5	11	20	60	25	25L, 14,5L
150-70	180-220/100-120	KSF150-70L	25	19	31	17	13	25	65	25	25L, 17L
150-95	180-220/113-161	KSF150-95L	25	19	31	20	15	31	70	25	25L, 20L
150-120	180-220/145-185	KSF150-120L	25	19	31	22	17	31	70	24	25L, 22L
185-50	220-265/69-103	KSF185-50L	27	21	31	14,5	11	25	65	25	27L, 14,5L
185-70	220-265/100-120	KSF185-70L	27	21	31	17	13	25	65	25	27L, 17L
185-95	220-265/113-161	KSF185-95L	27	21	31	20	15	31	71	25	27L, 20L
185-120	220-265/145-185	KSF185-120L	27	21	31	22	17	31	70	25	27L, 22L
185-150	220-265/180-220	KSF185-150L	27	21	31	25	19	31	70	24	27L, 25L
240-50	302-343/69-103	KSF240-50L	30	24	31	14,5	11	30	70	24	30L, 14,5L
240-95	302-343/113-161	KSF240-95L	30	24	31	20	15	31	70	24	30L, 20L
240-120	302-343/145-185	KSF240-120L	30	24	31	22	17	31	70	24	30L, 22L
240-150	302-343/180-220	KSF240-150L	30	24	31	25	19	31	70	24	30L, 25L
240-185	302-343/220-265	KSF240-185L	30	24	31	27	21	31	70	25	30L, 27L
300-70	340-400/100-120	KSF300-70L	31,5	24,5	35	17	13	24	70	25	32L, 17L
300-95	340-400/113-161	KSF300-95L	31,5	24,5	35	20	15	31	77	25	32L, 20L
300-120	340-400/145-185	KSF300-120L	31,5	24,5	35	22	17	31	76	25	32L, 22L
300-150	340-400/180-220	KSF300-150L	31,5	24,5	35	25	19	31	76	5	32L, 25L
300-185	340-400/220-265	KSF300-185L	31,5	24,5	35	27	21	31	76	5	32L, 27L
300-240	340-400/302-343	KSF300-240L	31,5	24,5	35	29	22,5	31	76	20	32L, 30L
400-95	412-500/113-161	KSF400-95L	38	30	45	20	15	31	90	10	38L, 20L
400-120	412-500/145-185	KSF400-120L	38	30	45	22	17	31	90	5	38L, 22L
400-150	412-500/180-220	KSF400-150L	38	30	45	25	19	31	90	10	38L, 25L
400-185	412-500/220-265	KSF400-185L	38	30	45	27	21	31	90	5	38L, 27L
400-240	412-500/302-343	KSF400-240L	38	30	45	30	24	31	90	10	38L, 30L
400-300	412-500/340-400	KSF400-300L	38	30	45	31,5	24,5	35	90	10	38L, 32L
500-150	500-580/180-220	KSF500-150L	42	33	65	25	19	31	101	10	42L, 25L
500-185	500-580/220-265	KSF500-185L	42	33	65	27	21	31	101	5	42L, 27L
500-240	500-580/302-343	KSF500-240L	42	33	65	30	24	31	101	5	42L, 30L
500-300	500-580/340-400	KSF500-300L	42	33	65	31,5	24,5	35	105	5	42L, 32L
500-400	500-580/412-500	KSF500-400L	42	33	65	38	30	45	115	5	42L, 38L
630-300	630-730/340-400	KSF630-300L	50	39	60	31,5	24,5	35	111	5	50L, 32L
630-400	630-730/412-500	KSF630-400L	50	39	60	38	30	45	121	5	50L, 38L
630-500	630-730/500-580	KSF630-500L	50	39	60	42	33	45	126	5	50L, 42L



SYSTEM 1300 for crimping Cu terminals and connectors 25 - 240 mm², and pre-rounding 25 - 150 mm²

V1300L



Crimp types



V1300L

Elpress crimp head, used with footpump P4000, battery / mains powered pump PS710 or mains powered pump P1000.

Particulars:

- crimps Cu-conductors of type KRF-L up to 240 mm²
- equipped with oil spray safety protection cap
- working pressure 63 MPa (630 bar)
- weight 3,7 kg, excl. accessories
- length 270 mm, incl. quick coupling, width 82 mm
- crimp force 130 kN (13 tons)
- light and flexible steel crimp head
- special nitrogen anti-corrosion surface treatment

PVL1300



Crimp types



PVL1300

PVL1300DB, (supplied with two batteries)

Battery powered crimp tool with 13 tons force. Uses the same crimp accessories as the other products in the above V1300 System.

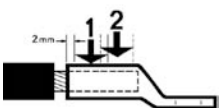
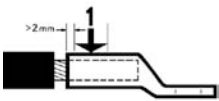
Particulars:

- ergonomic design that optimizes the balance of the tool in the users hand
- buzzing signal and flashing light if right pressure is not achieved
- LED lightning for work in dark environments
- possibility to document each crimp for unique service control
- crimp force 124 kN (13 ton)
- crimps/charge: 60-120 depending on size and temperature
- crimp time: 4-12 s depending on size
- working temperature -20°C to +40°C
- environmental friendly battery, Li-Ion Makita, 3.0 Ah, 18V
- battery charger Li-Ion Makita, charging time 22 min
- LED indication of charge status
- supplied with robust plastic case, battery, charger and instruction
- PVL1300DB, supplied with 2 batteries
- weight 5,4 kg, (incl battery)

Accessories for crimping Cu with V1300L and PVL1300



Die 13B20L.



One and two crimps.



Rounding punch 13R15DL and matrix 13R15ML.

PV130L



Crimp type



- Note that KRF terminals may be used on flexible (IEC60228, class 5) as well as stranded (class 2) conductors and for crimping of winding conductors in Transformer manufacture.
- Be sure to use dies exactly matching the terminal.

Crimp dies

Supplied as a pair. For hexagonal crimping of Cu terminals and connectors.

KRF/KSF			
Flexible, stranded, mm ²	Winding, mm ²	Dies	No. of crimps
25	30-47	13B11L	1
35	45-70	13B13L	1
50	69-103	13B14,5L	1
70	100-120	13B17L	1
95	113-161	13B20L	1
120	145-185	13B22L	2
150	180-220	13B25L	2
185	220-265	13B27L	2
240	302-343	13B30L	2

Pre-rounding

The package of rectangular conductors must be rounded to enter into the connector and a certain reduction of the conductor cross section area is also sometimes necessary. This work is done with the Elpress rounding punch and matrix.

Flexible, stranded, mm ²	Winding, mm ²	Matrix No.	Rounding punch No.
25	30-47	13R8ML	13R8DL
35	45-70	13R9ML	13R9DL
50	69-103	13R11ML	13R11DL
70	100-120	13R13ML	13R13DL
95	113-161	13R15ML	13R15DL
120	145-185	13R17ML	13R17DL
150	180-220	13R19ML	13R19DL

Battery powered crimp tool

Crimp range up to 10 mm²

PV130L

Battery powered crimp tool for crimping of standard tap changers and parallel through connectors.

Particulars:

- hexagonal crimping up to 10 mm²
- easy-to-open crimp head for rapid die change
- slim ergonomic design - good accessibility even in confined areas
- NiMh battery (9.6 V, 2,0 Ah), charge time approx. 40 minutes
- rapid crimp operation 2-4 seconds
- dies for crimping of special throug connectors
- weight 1,6 kg, length 360 mm





SYSTEM V250 for crimping Cu terminals and connectors 150 - 630 mm² and pre-rounding 185 - 730 mm²

V250L



Crimp types



V250L

Crimp head used together with footpump P4000, battery / mains powered pump P5710 or mains powered pump P1000.

Particulars:

- equipped with oil spray safety protection cap
- working pressure 63 MPa (630 bar)
- crimp force 250 kN (25 ton)
- crimp terminals and connectors of type KRF/KSF, Cu-conductors up to 500 mm²
- tested with Elpress pumps and connectors
- weight 4.6 kg, excl. accessories
- dimensions Ø 111 mm x 280 mm

Accessories for crimping Cu with V250L

- Note that KRF terminals may be used on flexible (IEC60228, class 5) as well as stranded (class 2) conductors and for crimping of winding conductors in Transformer manufacture.
- Be sure to use dies exactly matching the terminal.

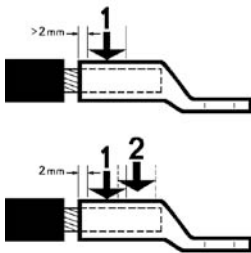
Crimp dies

Supplied in pairs.

For hexagonal crimping of Cu-terminals and connectors.



Die pair B2527L.



One and two crimps.

KRF/KSF			
Flexible, stranded, mm ²	Winding, mm ²	Dies for	No. of crimps
150	180-220	B2525L	1
185	220-265	B2527L	1
240	302-343	B2530L	1
300	340-400	B2532L	1
400	412-500	B2538L	2
500	500-580	B2542L	2
630	630-730	B2550L	3



Rounding matrix 25R21ML and rounding punch 25R21DL.

Pre-rounding

The package of rectangular conductors must be rounded to fit into the connector and a certain reduction of the conductor cross section area is also sometimes necessary. This work is done with the Elpress rounding punch and matrix.

Flexible, stranded, mm ²	Winding, mm ²	Matrix No.	Rounding punch No.
185	220-265	25R21ML	25R21DL
240	302-343	25R24ML	25R24DL
300	340-400	25R26ML	25R26DL
400	412-500	25R30ML	25R30DL
500	500-580	25R33ML	25R33DL
630	630-730	25R39ML	25R39DL



Light weight and handy pump designed according to customer request

PS710

PS710 is a hydraulic battery / mains powered pump for crimping with advanced control and supervision of the crimp procedure. It is equipped with a flexible system for almost all crimp applications where high performance and reliability is required. The pump is suitable as well in cable harness manufacturing as for electrician work in the installation field.

PS710 has power source for every kind of crimping work.

PS710E



PS710E

For the installer working in the distribution network or in the industry.

Technical data:

- Small size and low weight make it easy to use in every situation
- Highest performance both with Li-ion battery 28.8 V and mains power
- Display with keypad for full pump status information to operator
- Possibility to have crimps stored in control system
- PC communication with USB
- To be used with crimp head system 1300 or 250

PS710R



PS710R

For the user asking for standard solutions (without need of crimp traceability).

Technical data:

- Pump control without electronic system, relayed controlled
- Easy equipped without data communication
- Without battery
- To be used with crimp head system 1300 or 250

Standard solutions:

PS710E251 *

Included:

- pump E-version
- mains cable (for EU)
- hydraulic hose 2.5 m
- battery
- charger
- strap

PS710E501 *

Included:

- pump E-version
- mains cable (for EU)
- hydraulic hose 5.0 m
- battery
- charger
- strap

PS710R250 *

Included:

- pump R-version
- mains cable
- hydraulic hose 2.5 m
- strap

* for customers outside EU-countries, please contact Elpress

Mains powered pump

P1000

P1000 is a secure, lean produced 2-step pump as an economical alternative for industrial use where simplicity and reliability is required. The pump is supplied with Elpress safety hose with quick coupling. The robust although light weight-ed design allows intensive use in most cases. The pump is CE-approved.

Particulars:

- Self holding pressure during crimp cycle, automatic return after completed crimp
- Hydraulic pressure: Working range 0-63 (70) MPa, adjustable
- Hydraulic flow: Low pressure (up to 1,5 MPa) approx. 0,8 l/min, high pressure (more than 1,5 MPa) 0,2 l/min
- Oil volume: 2 l (usable 1,8 l)
- Oil: hydraulic oil ISOVG32
- Measures, w x d x h: approx. 250 x 150 x 384 mm (excl. hose)
- Weight 15 kg (incl. hose)
- Mains connection 230 V AC 50/60 Hz
- Allowable voltage fluctuation: Rated voltage \pm 5%
- Electric motor: 0,25 kW, Class E insulation, open type commutated motor 230 V, 50/60 Hz, single-phase, Max. current: 2,8 A (5 min.)
- Protection class IP20
- Environment temperatures 0 - 40°C
- CE-approved: Machine safety 98/37/CE, LVD 73/23/EEC
- Hydraulic hose 2,4 m, quick coupling, manoeuvre handle 12 V AC
- Mains cord 1,5 m earth plug

P1000



P1000-5

Same pump as above with hydraulic hose 5.0 m and quick coupling.

Battery powered cable cutter

PKL54



PKL54

Electric cable cutter; easy and safe to operate.

- Electric cable cutter for copper and aluminium cable
- Not intended for cutting steel
- Max cutting diameter 54 mm, equivalent to 4 x 240 mm²
- Charger 7.2-24V, charging time for battery approx. 60 min
- Weight including battery: 3.5 kg
- Size LxWxH: 450 x 105 x 120 mm
- The tool has a scissor action when cutting, which produces a good cut
- Integrated fuse as overvoltage protection
- Protective cap for perfect safety, CE approved
- Delivered with case and double batteries, 14.4V NiMH



Hydraulic cable cutters

■ *Not for steel wires or steel wire armoured cables.*

HKL40/KL40, HKL55/KL55, HKL85/KL85

A range of cable cutters covering virtually all needs for cutting power cables and OH-line wires. The cutting heads are powered by Elpress foot pump P4000, battery and mains operated electrohydraulic pump PS710 or mains powered pump P1000.

Technical specifications

Hydraulic manual cutters	HKL40	HKL55	HKL85
Hydraulic cutting heads	KL40	KL55	KL85
Max. opening	Ø 40	Ø 55	Ø 85
Max. cutting force, KN	88	43	55
Max. cutting capacity, examples.			
copper cable	Ø 40	400 (500) mm ²	630 mm ²
Cu annealed solid conductor		Ø 20	
Cu rod	Ø 30		
Aluminium cable	Ø 40	3x240+95 mm ²	3x240+95 mm ² 630 (800 mm ²)
Al annealed solid conductor		Ø 25	
ACSR	Ø 40		
Al bar	ca Ø 40		
Telephone cable		Ø 55	
Steel wire (<180 daN/mm ²)	Ø 11		
Steel rod	Ø 18		

Do not cut steel wire armoured cables.





SYSTEM ELPRESS

System Elpress symbolizes our **cornerstones** – safety and quality. In order to achieve a secure connection we offer **certified solutions** of the combination cable, terminal and tool.

For the installation to be accurate, the installer should undergo training in crimping technology at **Elpress Academy**.



For non-standard solutions you can **consult** us and let our own production and laboratory verify your solution. A preventive **service** maintenance of the tool is the base for the system to work.

Certification, Academy, Consulting and Service is System Elpress – your secure connection!



*We manufacture tested systems for electrical connectors
and their tools. You get a secure connection*

SYSTEM ELPRESS CERTIFICATION



We offer:

- Tool delivered with a certificate
- Verified and tested combination of cable, terminal and tool
- Certified solutions for customized product development
- Product approval in accordance with UL, DNV and CSA
- Third part quality and environment certification in accordance with ISO9001 and ISO14001



In order to achieve a secure connection we offer certified solutions of the combination cable, terminal and tool.

This is so that you as customer can feel secure when you use our system and be sure that a safe connection will be made when our products are used correctly.



FOR YOUR SAFETY

The System includes:

- Terminal, connector
- Crimping tool
- Correct cable
- Trained and skilled operator

The system is developed and tested in accordance with existing norms and standards, for example IEC.

Product development

- Customized solutions
- Specialized segment solutions
- Leading technology in our industry
- Innovative products





Quality & environment certified and approved according to

- ISO 14001
- ISO 9001
- DNV
- UL





*We have the necessary resources for you
to maintain the highest quality*

SYSTEM ELPRESS CONSULTING



We offer:

- Tests in laboratory
- Problem solving
- Technical and customer support
- Customized terminals and tools
- Audits and validations at your premises





WHY CONSULT US?

We have been developing, manufacturing and marketing complete cable crimping systems for electrical connectors with more than 50 years of experience. We have therefore the best knowledge and equipment for your requirements and demands.

You will have access to:

- Our technical department that develops constructions according to your needs.
- Our production who can manufacture unique solutions.
- Our laboratory who can supply for example
 - Electrical tests
 - Mechanical tests
 - Corrosion- and environmental tests

Contact us and let us assist you.







*Your educated personnel ensures the final quality of products and services.
Our Academy certificate is a quality document between you and your customer*

SYSTEM ELPRESS ACADEMY



We focus on the following four areas:

- Utility sector and installers
- Transformer manufacturers
- Traction/Train manufacturers
- Wind Power manufacturers



WHO AND HOW DO WE EDUCATE?

Utility and installation personnel

Level 1

General training for all staff. Provides a general knowledge of crimping in all areas;

- Crimping in general
- Terminals below 10 mm²
- Cu-connectors over 10 mm²
- Al-connectors from 16 mm²
- Cu-branching
- Bolt connections
- Deep earthing
- Standards and requirement
- Safety and maintenance

The program combines theory and practice and concludes with a written test. Course participants will receive certificate after completed education.

Level 2

Education aimed primarily at supervisors, engineers, designers and quality departments. Provides a deeper knowledge of the crimping and maintenance routines. After completed training, the competence is indicated with a certificate.

Documentation

After completed training each participant receives a certificate of the fulfilled education.

Time and place

A complete training seminar level 1 takes 2 days and you can decide whether the training should be at your premises or held in Elpress' training facility. Training level 2 takes approximately 1 day depending on scope.

Price

Base-price seminar level 1 EUR350/person.
 Seminar level 2 EUR500/person.
 Price can vary depending on the scope and number of participants. Maximum number of participants per seminar is 15. Travel expenses for the training officer are additional costs.

Transformer manufacturers

Level 1

For operators who work daily in the production. The aim is to train personnel in the special conditions applying in the transformer manufacturing. The education concerns;

- Crimping in general
- Management of tools
- Calculations and preparation for crimping
- Work procedure
- Quality inspection
- Safety in use
- Preventive maintenance in daily production

The training consists of a theoretical and a practical part and ends with a written test. Course participants will receive certificate after completed education.

Level 2

Education aimed primarily at supervisors, designers and quality departments. Provides a thorough knowledge of calculations, tool selection and management, problems and solutions and quality assessment. Completed training gives a certified authorization in the field.

Documentation

Course participants will receive Elpress Work Manual for transformer manufacture and a certificate of the fulfilled education.

Time and place

A complete training seminar level 1 takes 1 day and the training takes place in your facilities. Training level 2 takes approximately 1 day depending on scope.

Price

Base-price seminar level 1 EUR250/person.
 Seminar level 2 EUR500/person.
 Price can vary depending on the number of participants. For efficiency the maximum number of participants per seminar is 10. Travel expenses for the training officer are additional costs.

A follow-up of the certificates is necessary



Each training has two levels: a basic education for all staff, and a training targeted at designers, supervisors and quality controllers. It is also possible to adjust the training so the content fits the needs of the company. You can also decide whether the training should be at your premises or held in Elpress' training facility.

Traction/Train manufacturers

Level 1

Educate staff in the special demands and external conditions that apply in the manufacture of rail traffic. The education concerns;

- Crimping in general
- Management of tools
- Work procedure
- Elpress Dual-technology
- Quality control
- Safety in use
- Preventive maintenance in daily production

The training consists of a theoretical and a practical part and ends with a written test. Course participants will receive certificate after completed education.

Level 2

Education aimed primarily at supervisors, designers and quality departments. Provides a thorough knowledge of the selection of tools and management, problems and solutions and quality assessment. Completed training gives a certified authorization in the field.

Documentation

After completed training each participant receives a certificate of the fulfilled education.

Time and place

A complete training seminar level 1 takes 1 day and you can decide whether the training should be at your premises or held in Elpress' training facility. Training level 2 takes approximately 1 day depending on scope.

Price

Base-price seminar level 1 EUR250/person.
 Seminar level 2 EUR500/person
 Price can vary depending on the number of participants. For efficiency the maximum number of participants per seminar is 15. Travel expenses for the training officer are additional costs.

Wind Power manufacturers

Level 1

Educate staff in the special demands and external conditions that apply in the manufacture of wind turbines. The education concerns;

- Crimping in general
- Management of tools
- Work procedure
- Elpress Dual-technology
- Quality inspection
- Safety in use
- Preventive maintenance in daily production

The training consists of a theoretical and a practical part and ends with a written test. Course participants will receive certificate after completed education.

Level 2

Education aimed primarily at supervisors, engineers and designers and quality departments. Provides a thorough knowledge of the selection of tools and management, problems and solutions and quality assessment. Completed training gives a certified authorization in the field.

Documentation

After completed training each participant receives a certificate, showing the scope of the education, together with a compendium about crimping.

Time and place

A complete training seminar level 1 takes 1 day and you can decide whether the training should be at your premises or held in Elpress' training facility. Training level 2 takes approximately 1 day depending on scope.

Price

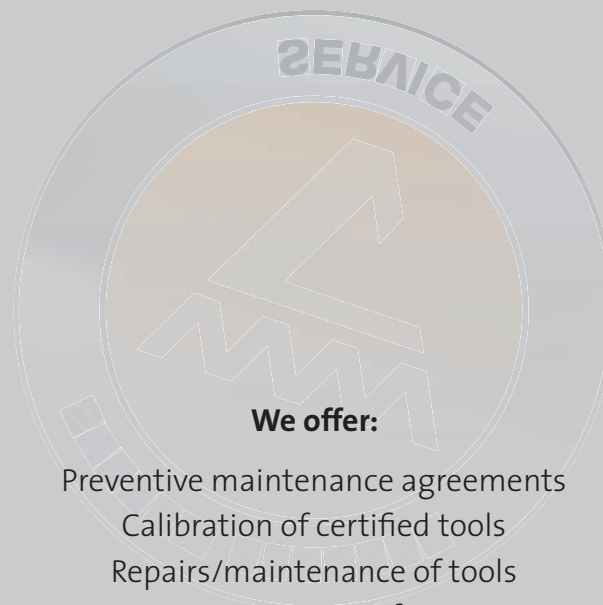
Base-price seminar level 1, EUR250/person.
 Seminar level 2 EUR500/person
 Price can vary depending on the number of participants. For efficiency the maximum number of participants per seminar is 15. Travel expenses for the training officer are additional costs.

A follow-up of the certificates is necessary



*Preventive maintenance agreements
secure the quality of your connection*

SYSTEM ELPRESS SERVICE



We offer:

- Preventive maintenance agreements
- Calibration of certified tools
- Repairs/maintenance of tools
- Crimping systems for rent
- Sales of spare parts



WHAT IS THE BEST SOLUTION FOR YOU?

Preventive maintenance agreements

Our Service offers you a flexible solution for enhanced security, with rapid service and high availability:

- Planned and preventive maintenance guarantees high performance for your equipment.
- Regular service intervals minimize the risk of unforeseen stoppages by indicating any safety or functional defects and by recommending measures to avoid such problems.
- Regular service intervals are normally implemented every 12 months at a fixed price.
- The price is based on the service level solution and equipment.
- A certificate is issued after the equipment has complied with calibration requirements. • The maintenance can be performed at your premisses.

Elpress Basic

Elpress Basic service agreement includes following points:

- Preventive maintenance, calibration with certification.
- General inspection of the tool
- Safety aspects in accordance with declaration of conformity (Compliance with Machine Safety Directive, Low Voltage Directive, EMC Directive)
- Function test
- Checking of accessories, e.g. crimp dies etc.
- Issue of Certificate

The inspection follows Elpress final inspection and acceptance inspection requirements.

Elpress Advance

Elpress Advance service agreement includes following points:

- Elpress Basic + corrective maintenance

Includes the Calibration/certification and wear & tear repairs at a fixed price.

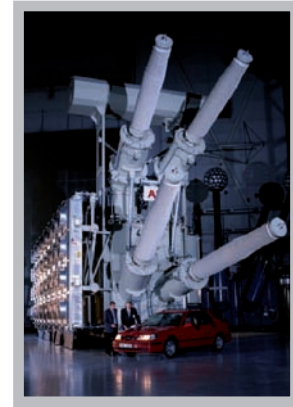
Calibration of certified tools

The calibration follows the same inspection points and requirements as Elpress Basic, but it is the customer's responsibility to send the tool for calibration.

Purchased a new product?

Send the Product registration form to Elpress and Elpress Basic is included for free the first year.





Since 1959 Elpress develops, manufacture and market complete crimping systems for electrical conductor terminations. Head office and factory with 120 employees are placed in Kramfors, Sweden. We have our own sales companies in Germany, Denmark and China. A wide network of qualified representatives support other markets.

