



*Quality products made in Norway for rough climatic situations*

# ALUMINIUM CROSS BARS

## 22kV

December 2023

## ALUMINIUM CROSS BARS 22kV

### USAGE

Aluminum crossbars have the same usage as crossbars made of wood or steel.

With various types of attachment, they can be mounted on all types of poles; wood, composite, aluminum and steel.

### ANODIZED ALUMINIUM CROSSBARS AS STANDARD

All crossbars made by EL-tjeneste AS are anodized with a dark brown color, this helps corrosion resistance and make them less visible in surrounding environment. The color is UV resistant and reduces light reflection.

### ANODIZING

By using the correct material in attached components, aluminum is the best alternative for use in crossbars. When exposed to air, aluminum will form a protective layer of oxide. This means that it is a well suited for material where cutting or drilling is needed. To further improve corrosion and wear resistance, anodizing will increase the thickness of the natural oxide layer.

Since the layer of oxide is an integrated part of the material, it can handle rougher use and is less prone for corrosion in harsh climate.

EL-tjeneste AS delivers anodized crossbars with a minimum thickness of 15my.

Some of the benefits of using anodized crossbars:

- Environmentally friendly, suitable for recycling.
- Corrosion resistance
- Esthetics
- Blends in with the surroundings

### USE IN CORROSIVE ENVIROMENT

Special considerations must be taken when used in corrosive environment. Grease can prevent moisture between materials and connection points. See [www.el-tjeneste.no](http://www.el-tjeneste.no) for more information.

### CROSSBAR ARRANGEMENT AND DATASHEET




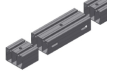


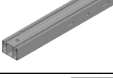
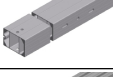


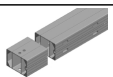
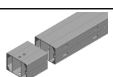
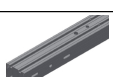
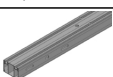
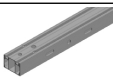


On our webpage [www.el-tjeneste.no](http://www.el-tjeneste.no) arrangement of the various crossbars, accessories and datasheet can be found. This can be downloaded and is useful during the projecting phase.




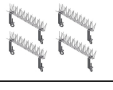
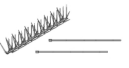

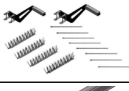






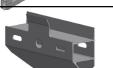
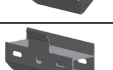

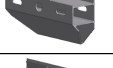


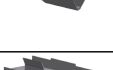
Each product has a label with a QR-code, this will lead to the product on the webpage.

### ALUMINIUM PRODUCTS USED IN POWER TRANSMISSION AND DISTRIBUTION

EL-tjeneste AS has delivered aluminum crossbars since 1996, they a have well proven durability. In Norway it has become the most common material for use in crossbars.

El-no	Name	Description	Unit	Picture
2836452	AL-Washer SA120-22	Washer length 120mm. Hole 1x $\varnothing$ 22mm. Important: always to be used to the crossbar together with pole clamp.	PCS	
2836611	Anch. crossbar TA2006D-3S	Anchoring crossbar for two-sided connection. 2-pole. Pole distance 2m, phase distance 2m. Twin pole clamp. Oblong hole distance 280mm.	PCS	
2836679	Anch. crossbar TA2020D-34-3S	Anchoring crossbar for two-sided connection. 2-pole. Pole distance 2m, phase distance 2m. Twin pole clamp. Oblong hole distance 340mm.	PCS	
2836432	Anch. crossbar TA2020D-3S	Anchoring crossbar for two-sided connection. 2-pole. Pole distance 2m, phase distance 2m. Twin pole clamp. Oblong hole distance 280mm.	PCS	
2836888	Anch. crossbar TA22-3S	Anchoring crossbar for two-sided connection. 2-pole. Pole distance 2m, phase distance 2m. Oblong hole distance 280mm.	PCS	
2836873	Anch. crossbar TA22S	Anchoring crossbar for two-sided connection. 2-pole. Pole distance 2m, phase distance 2m. Oblong hole distance 280mm.	PCS	
2836683	Anch. crossbar TA2525D-34-3S	Anchoring crossbar for two-sided connection. 2-pole. Pole distance 2,5m, phase distance 2,5m. Twin pole clamp. Oblong hole distance 280mm.	PCS	
2836603	Anch. crossbar TA2525D-3S	Anchoring crossbar for two-sided connection. 2-pole. Pole distance 2,5m, phase distance 2,5m. Twin pole clamp. Oblong hole distance 280mm.	PCS	
2837449	Anch. crossbar TAF2006-8S	Anchoring crossbar for one-sided and two-sided connection. 2-pole Pole distance 2m, phase distance 0,6m.	PCS	
2837433	Anch. crossbar TAF2020-34-8S	Anchoring crossbar for one-sided and two-sided connection. 2-pole Pole distance 2m, phase distance 2m. Oblong hole distance 340mm.	PCS	
2836680	Anch. crossbar TAF2020D-34-8S	Anchoring crossbar for one-sided and two-sided connection. 2-pole Pole distance 2m, phase distance 2m.	PCS	
2836804	Anch. crossbar TAF22-8S	Anchoring crossbar for one-sided and two-sided connection. 2-pole Pole distance 2m, phase distance 2m.	PCS	
2836639	Anch. crossbar TAF2525-44-8S	Anchoring crossbar for one-sided and two-sided connection. 2-pole Pole distance 2,5m, phase distance 2,5m. Oblong hole distance 420mm.	PCS	
2836687	Anch. crossbar TAF2525D-34-8S	Anchoring crossbar for one-sided and two-sided connection. 2-pole Pole distance 2,5m, phase distance 2,5m. Twin pole clamp.	PCS	

El-no	Name	Description	Unit	Picture
2836607	Anch. crossbar TAF2525D-8S	Anchoring crossbar for one-sided and two-sided connection. 2-pole Pole distance 2,5m, phase distance 2,5m. Twin pole clamp.	PCS	
2836842	Anch. crossbar TF11S	Anchoring crossbar for one-sided connection. 2-pole. Pole distance 1m, phase distance 1m.	PCS	
2836886	Anch. crossbar TF18S	Anchoring crossbar for one-sided connection. 2-pole. Pole distance 1m, phase distance 0,8m.	PCS	
2836839	Anch. crossbar TF2006D-3S	Anchoring crossbar for one-sided connection. 2-pole. Pole distance 2,0m, phase distance 0,6m. For twin-pole BLL.	PCS	
2836612	Anch. crossbar TF2015-07-3S	Anchoring crossbar for one-sided connection. 2-pole. Pole distance 2m, phase distance 1,5m to 0,7m.	PCS	
2836846	Anch. crossbar TF215-3S	Anchoring crossbar for one-sided connection. 2-pole. Pole distance 2m, phase distance 1,5m.	PCS	
2836874	Anch. crossbar TF215S	Anchoring crossbar for one-sided connection. 2-pole. Pole distance 2m, phase distance 1,5m.	PCS	
2836805	Anch. crossbar TF22-7S	Anchoring crossbar for one-sided connection. 2-pole. Pole distance 2m, phase distance 2m.	PCS	
2836875	Anch. crossbar TF22S	Anchoring crossbar for one-sided connection. 2-pole. Pole distance 2m, phase distance 2m.	PCS	
2836844	Anch. crossbar TF246D-3S	Anchoring crossbar for one-sided connection. 2-pole. Pole distance 2m, phase distance 0,46m. For twin-pole BLL.	PCS	
2836684	Anch. crossbar TF2525D-34-7S	Anchoring crossbar for one-sided connection. 2-pole. Pole distance 2,5m, phase distance 2,5m. Twin pole clamp.	PCS	
2836604	Anch. crossbar TF2525D-7S	Anchoring crossbar for one-sided connection. 2-pole. Pole distance 2,5m, phase distance 2,5m. Twin pole clamp.	PCS	
2836803	Anch. crossbar TF26-3S	Anchoring crossbar for one-sided connection. 2-pole. Pole distance 2m, phase distance 0,6m.	PCS	
2836885	Anch. crossbar TF27S	Anchoring crossbar for one-sided connection. 2-pole. Pole distance 2m, phase distance 0,7m.	PCS	
2836887	Anch. crossbar TF87S	Anchoring crossbar for one-sided connection. 2-pole. Pole distance 0,8m, phase distance 0,7m.	PCS	
2836892	Anch. crossbar TFA1S	Anchoring crossbar for one-sided connection with stay bar. 1-pole A. Phase distance 1m.	PCS	
2836898	Anch. crossbar TFE6S	Anchoring crossbar for one-sided connection with middle support. 1-pole. Phase distance 0,6m.	PCS	
2837432	Anch. crossbar TA2020-34-3S	Anchoring crossbar for two-sided connection. 2-pole. Pole distance 2m, phase distance 2m. Oblong hole distance 340mm.	PCS	

















El-no	Name	Description	Unit	Picture
2836660	Antiskid SKK-1-24	Antiskid for poles. 1xM24.	PCS	
2836658	Antiskid SKK-2-20	Antiskid for poles. 2xM20.	PCS	
2836455	Antiskid SKK-2-24	Antiskid for poles. 2xM24.	PCS	
2857827	Bird deflector FAUS	Kit with four bird deflectors for mounting on crossbar. For live working and 1,5m phase distance.	PCS	
2836816	Bird deflector FVT	Bird deflector made of a UV-resistant, transparent plastic material. Comes with plastic strips to attach the bird deflector to a crossbar.	PCS	
2836826	Bird protection bracket HSAUS	Bird protection bracket. Phase 1,5m. For live working.	SET	
2836817	Bird protection bracket HSFBS	Bird protection bracket. Phase 1,5m.	SET	
2836820	Crossbar for transformer TRB2S	Crossbar for transformer. Pole distance 2m (H).	SET	
2836818	Crossbar for transformer TRB2S-A5	Crossbar for transformer. Pole distance 2m (A 1:5).	SET	
2836819	Crossbar for transformer TRB2S-A6,5	Crossbar for transformer. Pole distance 2m (A 1:6,5).	SET	
2836821	Crossbar for transformer TRBE2S	Crossbar for transformer. Pole distance 2m (H).	SET	
2837440	Crossbar for transformer TRBF1S	Crossbar for transformer. Pole distance 2m (H).	SET	
2836495	Crossbar support insulator TSK	Crossbar for support isolator.	PCS	
2836409	Crossbar support ST107-34	Support for crossbar width 107mm. Oblong hole distance 340mm.	PCS	
2836442	Crossbar support ST107-42	Support for crossbar width 107mm. Oblong hole distance 420mm.	PCS	
2836445	Crossbar support ST107-50	Support for crossbar width 107mm. Oblong hole distance 500mm.	PCS	
2836746	Crossbar support ST107S	Support for crossbar width 107mm. Oblong hole distance 280mm.	PCS	
2836407	Crossbar support ST160-34	Support for crossbar width 160mm. Oblong hole distance 340mm. Always to be used with crossbar profile 7 (160x230).	PCS	
2836427	Crossbar support ST160-42	Support for crossbar width 160mm. Oblong hole distance 420mm. Always to be used with crossbar profile 7 (160x230).	PCS	
2836428	Crossbar support ST160-50	Support for crossbar width 160mm. Oblong hole distance 500mm. Always to be used with crossbar profile 7 (160x230).	PCS	
















El-no	Name	Description	Unit	Picture
2836494	Crossbar support ST160-58	Support for crossbar width 160mm. Oblong hole distance 580mm. Always to be used with crossbar profile 7 (160x230).	PCS	
2836732	Crossbar support ST160S	Support for crossbar width 160mm. Oblong hole distance 580mm. Always to be used with crossbar profile 7 (160x230).	PCS	
2836895	Crossbar support ST1S	Support for line switch crossbar width 107mm.	PCS	
2836408	Crossbar support ST230-34	Support for crossbar width 230mm. Oblong hole distance 340mm. Always to be used with crossbar profile 7 (230x160).	PCS	
2836425	Crossbar support ST230-42	Support for crossbar width 230mm. Oblong hole distance 420mm. Always to be used with crossbar profile 7 (230x160).	PCS	
2836426	Crossbar support ST230-50	Support for crossbar width 230mm. Oblong hole distance 500mm. Always to be used with crossbar profile 7 (230x160).	PCS	
2836745	Crossbar support ST230S	Support for crossbar width 230mm. Oblong hole distance 280mm. Always to be used with crossbar profile 7 (230x160).	PCS	
2836406	Crossbar support ST83-34	Support for crossbar width 83mm. Oblong hole distance 340mm.	PCS	
2836739	crossbar support ST83S	Support for crossbar width 83mm. Oblong hole distance 280mm.	PCS	
2836605	Crossbar T30-2525-1S	Crossbar for face wire loop (3E/3A). Pole distance 2,5m, phase distance 2,5m Oblong hole distance 280mm.	PCS	
2836433	Draw bracket OPB-1-26	Draw bracket for crossbars	PCS	
2836836	Earthing clamp J10	Earthing clamp M10. For all crossbars except cable cross bars.	PCS	
2836837	Earthing clamp J10V	Earthing clamp M10 90-degree. For all crossbars except cable cross bars. For earth wire KHF25-50.	PCS	
2837477	Guy-wire Bracket BFE	Bracket for TE5TS and TFE6S for Guy-wire mount	PCS	
2836834	Insulator bracket PF107	Insulator bracket for crossbars 107x160mm. With fasteners.	PCS	
2836833	Insulator bracket PF120	Insulator bracket for crossbars 120x80mm. With fasteners.	PCS	
2836835	Insulator bracket PFF	Insulator bracket for bypass crossbars 80x120mm. With fasteners.	PCS	
2836642	Insulator bracket PFL	Insulator bracket for crossbars 107x160mm. With fasteners.	PCS	
2836893	Insulator bracket PFS	Insulator bracket for crossbars 107x57,5mm. With fasteners.	PCS	















El-no	Name	Description	Unit	Picture
2836641	Line switch crossbar TB25BK-1S	Line switch crossbar. 2-pole. Pole distance 2,5m.	PCS	
2836889	Line switch crossbar TB2BKS	Line switch crossbar. 2-pole. Pole distance 2m.	PCS	
2836890	Line switch crossbar TB8BKS	Line switch crossbar. 2-pole. Pole distance 0,8m.	PCS	
2836891	Line switch crossbar TBE1S	Line switch crossbar. 1-pole. With metal rod.	PCS	
2836437	Load-bearing crossbar T1212-2PF	Load-bearing crossbar. 2-pole. Pole distance 1,2m, phase distance 1,2m. With bracket for suspended mounting in pole-direction.	PCS	
2836880	Load-bearing crossbar T18S	Load-bearing crossbar. 2-pole. Pole distance 1m, phase distance 0,8m. For insulator pin.	PCS	
2836610	Load-bearing crossbar T2006-2PF	Load-bearing crossbar. 2-pole. Pole distance 2m, phase distance 0,6m. With bracket for suspended mounting in pole-direction.	PCS	
2836485	Load-bearing crossbar T2020-2PF	Load-bearing crossbar. 2-pole. Pole distance 2m, phase distance 2m. With bracket for suspended mounting in pole-direction.	PCS	
2837430	Load-bearing crossbar T2020-34-4S	Load-bearing crossbar. 2-pole. Pole distance 2m, phase distance 2m. Oblong hole distance 340mm.	PCS	
2837431	Load-bearing crossbar T2020-34-5S	Load-bearing crossbar. 2-pole. Pole distance 2m, phase distance 2m. Oblong hole distance 340mm.	PCS	
2836677	Load-bearing crossbar T2020D-34-4S	Load-bearing crossbar. 2-pole. Pole distance 2m, phase distance 2m. Twin pole clamp.	PCS	
2836879	Load-bearing crossbar T212S	Load-bearing crossbar. 2-pole. Pole distance 2m, phase distance 1,2m. For insulator pin.	PCS	
2836877	Load-bearing crossbar T215S	Load-bearing crossbar. 2-pole. Pole distance 2m, phase distance 1,5m. For insulator pin.	PCS	
2836435	Load-bearing crossbar T2206-2PF	Load-bearing crossbar. 2-pole. Pole distance 2,2m, phase distance 0,6m. With bracket for suspended mounting in pole-direction.	PCS	
2837448	Load-bearing crossbar T2206-3PF	Load-bearing crossbar. 2-pole. Pole distance 2,2m, phase distance 0,6m. With bracket for suspended mounting in pole-direction.	PCS	
2836870	Load-bearing crossbar T22-4S	Load-bearing crossbar. 2-pole. Pole distance 2m, phase distance 2m.	PCS	
2836897	Load-bearing crossbar T22-5S	Load-bearing crossbar. 2-pole. Pole distance 2m, phase distance 2m.	PCS	








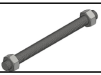
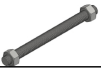

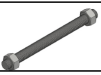
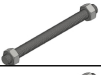
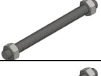



El-no	Name	Description	Unit	Picture
2836871	Load-bearing crossbar T22S	Load-bearing crossbar. 2-pole. Pole distance 2m, phase distance 2m.	PCS	
2836682	Load-bearing crossbar T2525D-34-4S	Load-bearing crossbar. 2-pole. Pole distance 2,5m, phase distance 2,5m. Twin pole clamp.	PCS	
2836688	Load-bearing crossbar T2525D-34-5S	Load-bearing crossbar. 2-pole. Pole distance 2,5m, phase distance 2,5m. Twin pole clamp.	PCS	
2836689	Load-bearing crossbar T2525D-34-6S	Load-bearing crossbar. 2-pole. Pole distance 2,5m, phase distance 2,5m. Twin pole clamp.	PCS	
2836600	Load-bearing crossbar T2525D-4S	Load-bearing crossbar. 2-pole. Pole distance 2,5m, phase distance 2,5m. Twin pole clamp.	PCS	
2836601	Load-bearing crossbar T2525D-5S	Load-bearing crossbar. 2-pole. Pole distance 2,5m, phase distance 2,5m. Twin pole clamp.	PCS	
2836602	Load-bearing crossbar T2525D-6S	Load-bearing crossbar. 2-pole. Pole distance 2,5m, phase distance 2,5m. Twin pole clamp.	PCS	
2836882	Load-bearing crossbar T28S	Load-bearing crossbar. 2-pole. Pole distance 2m, phase distance 0,8m. For insulator pin. BLX.	PCS	
2836881	Load-bearing crossbar T86S	Load-bearing crossbar. 2-pole. Pole distance 0,8m, phase distance 0,6m. For insulator pin. BLX.	PCS	
2836843	Load-bearing crossbar TD2005-2S	Load-bearing crossbar. 2-pole. Pole distance 2m, phase distance 0,5m. For twin-pole BLL.	PCS	
2836878	Load-bearing crossbar TE12S	Load-bearing crossbar with stay bar. 1-pole. Phase distance 1,2m. For insulator pin.	PCS	
2836872	Load-bearing crossbar TE15S	Load-bearing crossbar with stay bar. 1-pole. Phase distance 1,5m. For insulator pin.	PCS	
2836883	Load-bearing crossbar TE5S	Load-bearing crossbar with stay bar. 1-pole. Phase distance 0,5m. For insulator pin. BLX.	PCS	
2836899	Load-bearing crossbar TE5TS	Load-bearing crossbar with middle support. 1-pole. Phase distance 0,5m. For insulator pin. BLX.	PCS	
2836827	Load-bearing crossbar TP2005-2S	Load-bearing crossbar. 2-pole. Pole distance 0,8m, phase distance 0,6m. For insulator pin and twin-pole BLL.	PCS	

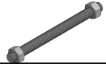
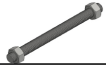
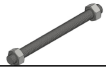
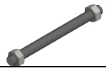































El-no	Name	Description	Unit	Picture
2836845	Load-bearing crossbar TP22-2S	Load-bearing crossbar. 2-pole. Pole distance 2m, phase distance 2m. For insulator pin.	PCS	
2836465	Mounting bolt MBS16-350	Mounting bolt with aluminium washer for fastening support rod for crossarm on single composite utility pole.	PCS	
2837410	Overhead kabel bracket BLK	Overhead kabel bracket set. With phase bracket B107 and pole clamp MK1630.	PCS	
2836869	Pendulum suspension PF2	Pendulum suspension for chain insulator. For crossbar profile P2.	SET	
2836446	Pendulum suspension PF3	Pendulum suspension for chain insulator. For crossbar profile P3.	PCS	
2836862	Phase bracket B107E	Phase stirrup bracket one-sided anchor. Suits crossbar P3, width 107. Unit set of 3.	SET	
2836866	Phase bracket B107EA	Phase stirrup bracket one-sided. Suits crossbar TFA1S. Unit set of 3.	SET	
2836863	Phase bracket B107T	Phase stirrup bracket two-sided anchor. Suits crossbar P3, width 107. Unit set of 3.	SET	
2836865	Phase bracket B107TA	Phase stirrup bracket two-sided. Suits crossbar P1, width 107. Unit set of 3.	SET	
2836864	Phase bracket B120TA	Phase stirrup bracket two-sided. Suits crossbar P2, width 120. Unit set of 3.	SET	
2836847	Phase bracket B160-8E	Phase stirrup bracket one-sided. Suits crossbar P3, P8, width 160. Unit set of 3.	SET	
2836851	Phase bracket B160-8T	Phase stirrup bracket two-sided. Suits crossbar P3, P8, width 160.	SET	
2836743	Phase bracket B160T2	Phase stirrup bracket two-sided for toppline. Suits crossbar P3, P8, width 160. Unit set of 2.	SET	
2836860	Phase bracket B80E	Phase stirrup bracket one-sided. Suits crossbar P2, width 80. Unit set of 3.	SET	
2836861	Phase bracket B80T	Phase stirrup bracket two-sided. Suits crossbar P2, width 80. Unit set of 3.	SET	
2836867	Phase bracket BE80T	Phase stirrup bracket two-sided with pole clamp. Suits crossbar TFE6S. Unit set of 3.	SET	

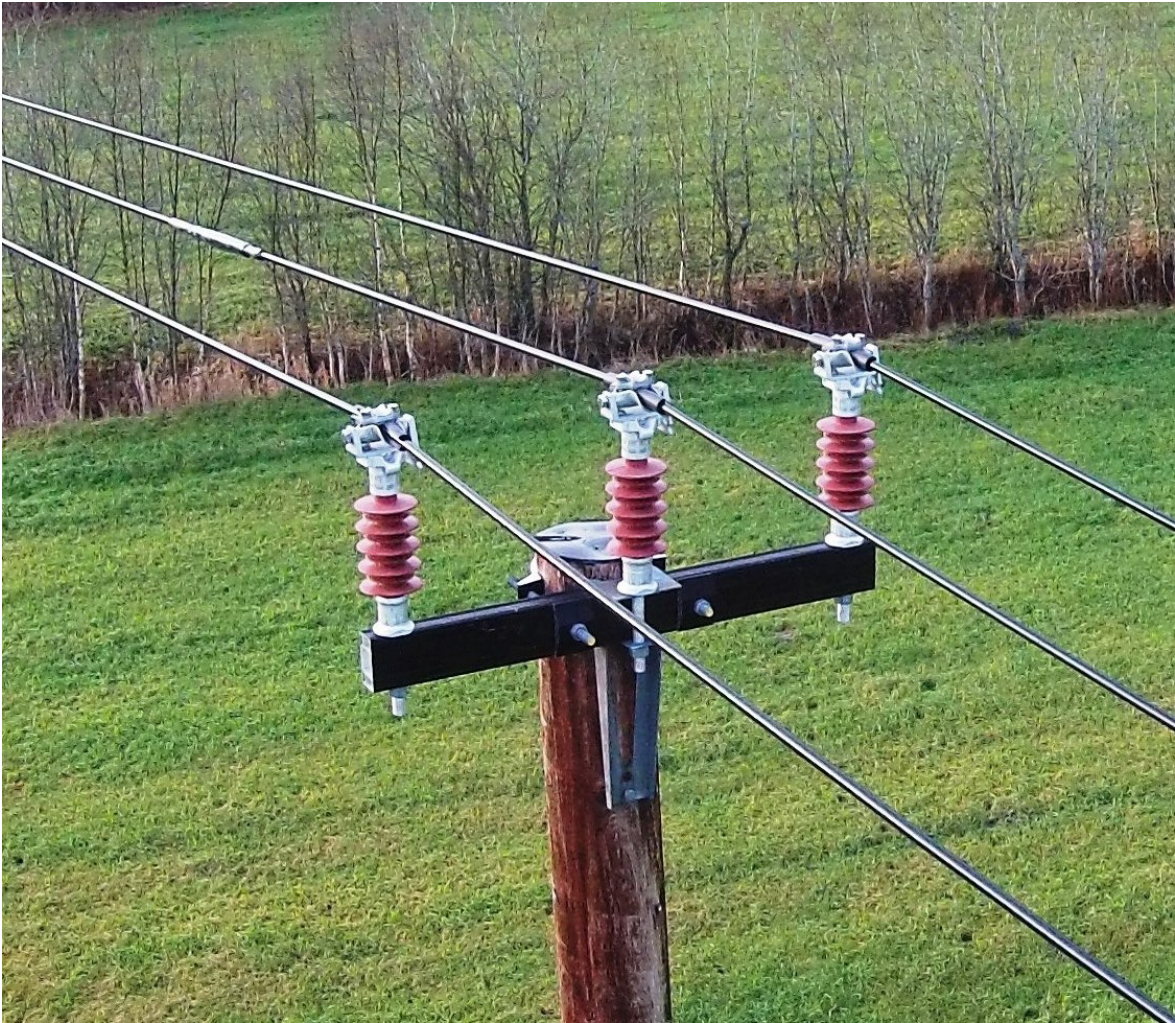
El-no	Name	Description	Unit	Picture
2836730	Phase bracket BH65	Phase stirrup bracket. For crossbar P4, P5, width 65. Unit set of 3.	SET	
2836747	Phase bracket F160-3TA	Phase bracket two-sided. For crossbar P3 width 160. Unit set of 3.	SET	
2836733	Phase bracket F160-8E	anchorsfeste one-sided. For crossbar P8, width 160. Unit set of 3.	SET	
2836640	Phase bracket F160-8E2	anchorsfeste one-sided. For crossbar P8, width 160. Unit set of 2.	SET	
2836749	Phase bracket F160-8TA	Phase bracket two-sided. For crossbar P8, width 160. Unit set of 3.	SET	
2836735	Phase bracket F160T	Anchor bracket . two-sided. For crossbar P7, width 160. Unit set of 3.	SET	
2836797	Phase bracket F160T2	Phase bracket . two-sided. For crossbar P7, width 160. Unit set of 2.	SET	
2836412	Phase bracket F230E	Phase bracket . one-sided. For crossbar P7, width 230. Unit set of 3.	SET	
2836609	Phase bracket F230T	Phase bracket . two-sided. For crossbar P7, width 230. Unit set of 3.	SET	
2836615	Phase bracket FFK1-5	Phase bracket for A-pole 1:5 angle ratio. Distance upper holes: 847mm. For 1 pole. Delivered with square washers without bolts.	PCS	
2837442	Phase bracket FFK1-5-530	Phase bracket for A-pole 1:5 angle ratio. Distance upper holes: 530mm. For 1 pole. Delivered with square washers without bolts.	PCS	
2836742	Phase bracket FH160E	Phase bracket . For crossbar P7, width 160. Unit set of 3.	SET	
2836740	Phase bracket FH65	Phase bracket. For crossbar P4, P5, width 65. Unit set of 3.	SET	
2836741	Phase bracket FH83	Phase bracket . For crossbar P6, width 83. Unit set of 3.	SET	
2836781	Phase bracket FH95	Phase bracket. For crossbar P9, width 95. Unit set of 3.	SET	

El-no	Name	Description	Unit	Picture
2836789	Phase bracket FHO160	Phase bracket for omførings-isolator. For crossbar height max 170mm and bolt M20. Unit set of 3.	SET	
2836744	Phase/wire bracket FB160	Phase/wire bracket two-sided. With bolts M20 and bolt distance 182-218mm.	PCS	
2836748	Phase/wire bracket FB200	Phase/wire bracket two-sided. With bolts M24 and bolt distance 182-218mm.	PCS	
2837474	Phase/wire bracket FB200-3T	Phase/wire bracket two-sided with 3 wire holes. With bolts M24 and bolt distance 182-218mm.	PCS	
2836613	Phase/wire bracket FFE160	Phase/wire bracket one-sided. With bolts M20 and bolt distance 182-218mm.	PCS	
2836484	Phase/wire bracket FFE200	Phase/wire bracket one-sided. With bolts M24 and bolt distance 182-218mm.	PCS	
2837475	Phase/wire bracket FFE200-3	Phase/wire bracket one-sided with 3 holes for wires. With bolts M24 and bolt distance 182-218mm.	PCS	
2836752	Pole clamp MK1624	Aluminum pole clamp with bolts M20x250. For pole diameter Ø180-200. Selection table with regards to crossbar type and pole diameter is on our website.	PCS	
2836750	Pole clamp MK1630	Aluminium pole clamp with bolts M20x350. For pole diameter Ø180-275. Selection table with regards to crossbar type and pole diameter is on our website.	PCS	
2836754	Pole clamp MK2432	Aluminium pole clamp with bolts M20x400. For pole diameter Ø190-280. Selection table with regards to crossbar type and pole diameter is on our website.	PCS	
2836753	Pole clamp MK2433	Aluminium pole clamp with bolts M20x500. For pole diameter Ø240-330. Selection table with regards to crossbar type and pole diameter is on our website.	PCS	
2836759	Pole clamp MK3337	Aluminium pole clamp with bolts M20x600. For pole diameter Ø300-370. Selection table with regards to crossbar type and pole diameter is on our website.	PCS	
2836690	Pole clamp MKS2530	Steel pole clamp for pole diameter Ø250-300mm. Hot-dip galvanzied. For boltsize M20. Bolts, nuts and washers not included. Selection table with regards to bolt length, crossbar type and pole diameter is on our website.	PCS	
2836691	Pole clamp MKS3035	Steel pole clamp for pole diameter Ø300-350mm. Hot-dip galvanzied. For boltsize M20. Bolts, nuts and washers not included. Selection table with regards to bolt length, crossbar type and pole diameter is on our website.	PCS	

El-no	Name	Description	Unit	Picture
2836617	Pole clamp MKS3544	Steel pole clamp for pole diameter $\varnothing$ 350-440mm. Hot-dip galvanzied. For boltsize M20. Bolts, nuts and washers not included. Selection table with regards to bolt length, crossbar type and pole diameter is on our website.	PCS	
2836618	Pole clamp MKS4453	Steel pole clamp for pole diameter $\varnothing$ 440-530mm. Hot-dip galvanzied. For boltsize M20. Bolts, nuts and washers not included. Selection table with regards to bolt length, crossbar type and pole diameter is on our website.	PCS	
2836665	Pole clamp MKS5360	Steel pole clamp for pole diameter $\varnothing$ 530-600mm. Hot-dip galvanzied. For boltsize M20. Bolts, nuts and washers not included. Selection table with regards to bolt length, crossbar type and pole diameter is on our website.	PCS	
2836410	Pole diagonal cross STK17-20	Pole diagonal cross for wood and composite poles. Pole distance: 1,7m. Fixing bracket 4x $\varnothing$ 26mm. Fasteners not included.	PCS	
2836616	Pole diagonal cross STK19	Pole diagonal cross for wood and composite poles. Pole distance: 1,9m. Fixing bracket 2x $\varnothing$ 26mm. Fasteners not included.	PCS	
2836792	Pole diagonal cross STK20	Pole diagonal cross for wood and composite poles. Pole distance: 2m. Fixing bracket 2x $\varnothing$ 22mm. Fasteners not included.	PCS	
2837441	Pole diagonal cross STK25	Pole diagonal cross for wood and composite poles. Pole distance: 2,5m. Fixing bracket 2x $\varnothing$ 22mm. Fasteners not included.	PCS	
2836632	Stud bolt M20 GB1000	Stud bolt M20x1000 with nuts.	PCS	
2836620	Stud bolt M20 GB250	Stud bolt M20x250 with nuts.	PCS	
2836633	Stud bolt M20 GB250-SA	Stud bolt M20x250 with nuts, square washer and washer SA1.	PCS	
2836621	Stud bolt M20 GB300	Stud bolt M20x300 with nuts.	PCS	
2836622	Stud bolt M20 GB350	Stud bolt M20x350 with nuts.	PCS	
2836623	Stud bolt M20 GB400	Stud bolt M20x400 with nuts.	PCS	
2836624	Stud bolt M20 GB450	Stud bolt M20x450 with nuts.	PCS	
2836625	Stud bolt M20 GB500	Stud bolt M20x500 with nuts.	PCS	
2836626	Stud bolt M20 GB550	Stud bolt M20x550 with nuts.	PCS	

El-no	Name	Description	Unit	Picture
2836627	Stud bolt M20 GB600	Stud bolt M20x600 with nuts.	PCS	
2836628	Stud bolt M20 GB650	Stud bolt M20x650 with nuts.	PCS	
2836629	Stud bolt M20 GB700	Stud bolt M20x700 with nuts.	PCS	
2836630	Stud bolt M20 GB800	Stud bolt M20x800 with nuts.	PCS	
2836631	Stud bolt M20 GB900	Stud bolt M20x900 with nuts.	PCS	
2836476	Stud bolt M24 GB24-1000	Stud bolt M24x1000 with nuts and washers.	PCS	
2836469	Stud bolt M24 GB24-300	Stud bolt M24x300 with nuts and washers.	PCS	
2857838	Stud bolt M24 GB24-350	Stud bolt M24x350 with nuts and washers.	PCS	
2836470	Stud bolt M24 GB24-400	Stud bolt M24x400 with nuts and washers.	PCS	
2857839	Stud bolt M24 GB24-450	Stud bolt M24x450 with nuts and washers.	PCS	
2836471	Stud bolt M24 GB24-500	Stud bolt M24x500 with nuts and washers.	PCS	
2857840	Stud bolt M24 GB24-550	Stud bolt M24x550 with nuts and washers.	PCS	
2836472	Stud bolt M24 GB24-600	Stud bolt M24x600 with nuts and washers.	PCS	
2857841	Stud bolt M24 GB24-650	Stud bolt M24x650 with nuts and washers.	PCS	
2836473	Stud bolt M24 GB24-700	Stud bolt M24x700 with nuts and washers.	PCS	
2857842	Stud bolt M24 GB24-750	Stud bolt M24x750 with nuts and washers.	PCS	
2836474	Stud bolt M24 GB24-800	Stud bolt M24x800 with nuts and washers.	PCS	
2836475	Stud bolt M24 GB24-900	Stud bolt M24x900 with nuts and washers.	PCS	
2836791	Tower TTL	Tower for overhead shield. Load-bearing. Pole clamp and fasteners are not included.	PCS	
2836454	Tower TTL-A	Tower for overhead shield. Anchoring. Phase bracket included. Pole clamp and fasteners are not included.	PCS	
2836606	U-bracket BH107	U-bracket for crossbar height 107mm.	SET	
2836840	U-bracket B1	U-bracket for crossbar height 120mm.	SET	
2836479	Washer SA146D	Washer length 146mm. Hole 2xØ22mm. Important: always to be used to the crossbar together with pole clamp.	PCS	
2836669	Washer SA160-27	Washer length 143mm. Hole 1xØ27mm. Important: always to be used to the crossbar together with pole clamp.	PCS	

El-no	Name	Description	Unit	Picture
2836828	Washer SA160DS	Washer length 143mm. Hole 2x $\varnothing$ 22mm. Important: always to be used to the crossbar together with pole clamp.	PCS	
2836829	Washer SA160S	Washer length 143mm. Hole 1x $\varnothing$ 22mm. Important: always to be used to the crossbar together with pole clamp.	PCS	
2836477	Washer SA175D	Washer length 175mm. Hole 2x $\varnothing$ 22mm. Important: always to be used to the crossbar together with pole clamp.	PCS	
2836478	Washer SA196D	Washer length 196mm. Hole 2x $\varnothing$ 22mm. Important: always to be used to the crossbar together with pole clamp.	PCS	
2836894	Washer SA1S	Washer length 80mm. Hole 1x $\varnothing$ 22mm. Important: always to be used to the crossbar together with pole clamp.	PCS	
2836815	Washer SA1S-27	Washer length 80mm. Hole 1x $\varnothing$ 27mm. Important: always to be used to the crossbar together with pole clamp.	PCS	
2836480	Washer SA211D	Washer length 211mm. Hole 2x $\varnothing$ 22mm. Important: always to be used to the crossbar together with pole clamp.	PCS	
2836481	Washer SA241D	Washer length 241mm. Hole 2x $\varnothing$ 22mm. Important: always to be used to the crossbar together with pole clamp.	PCS	
2836790	Yoke FK7	Yoke intended for composite insulators where reinforcement is required. Adapted to all composite insulators with ball coupling and bolt. Delivered in sets of 3 pcs.	SET	





*Norwegian quality and innovation*

*Quality products made in Norway for rough climatic situations*

---

**Sales- and development,  
Trondheim**

Østre Rosten 84G  
NO-7075 Tiller, NORWAY  
Phone: +47 976 74 000  
[www.el-tjeneste.no](http://www.el-tjeneste.no)  
E-mail: [info@eltjeneste.no](mailto:info@eltjeneste.no)

**Factory and warehouse,  
Steinkjer**

Jæktsmedgata 4  
NO-7725 Steinkjer, NORWAY  
Phone: +47 976 74 000  
Mail: [info@eltjeneste.no](mailto:info@eltjeneste.no)