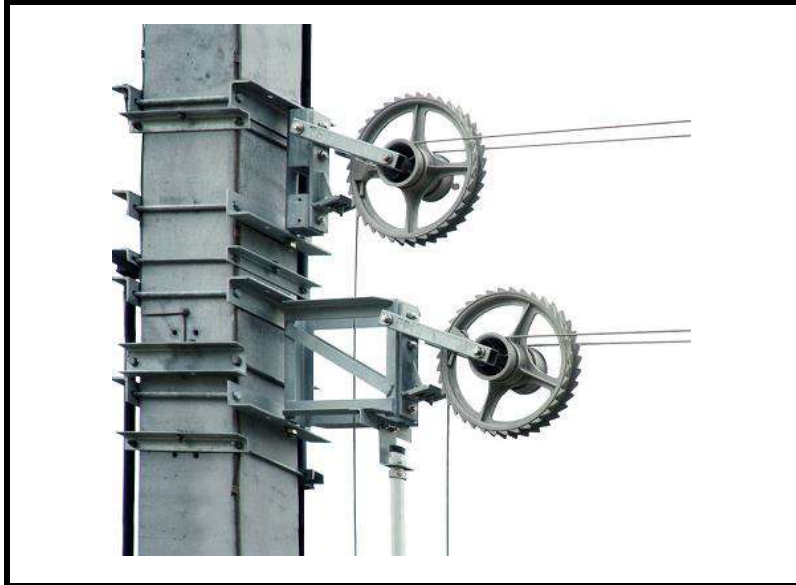




## DEMİRYOLU KATENER SİSTEMLERİ



### KONSOL / HOBAN SETLERİ



### OTOMATİK GERGİ SİSTEMLERİ HAVAI HAT ÇÖZÜMLERİ



**KONSOLLAR**

**Sayfa 3-16**

**ELEKTRİK BAĞLANTI ELEMANLARI**

**Sayfa 17-20**

**KELEPÇELER**

**Sayfa 21-30**

**TEL BAĞLANTILARI**

**Sayfa 31-36**

**OTOMATİK GERGİ SİSTEMLERİ**

**Sayfa 37-41**

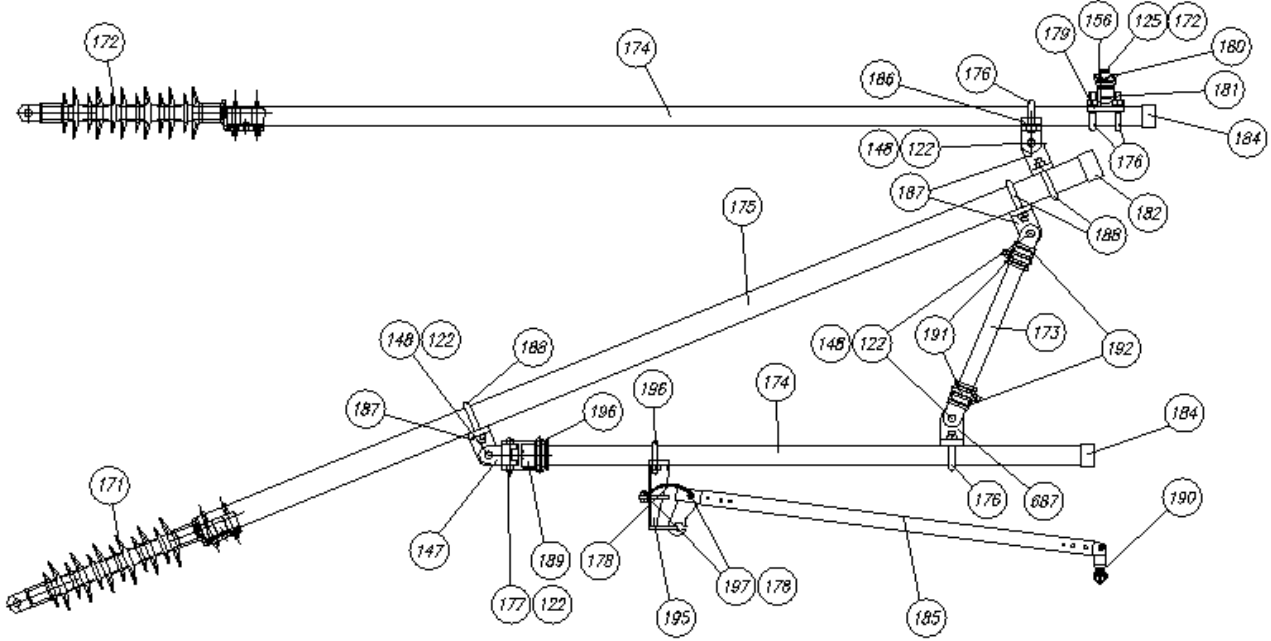
**PANDÜLLER**

**Sayfa 42-45**



TEP - 003

**ÇEKİYE ÇALIŞAN KONSOL SETİ**  
**INWARDS CANTILEVER**

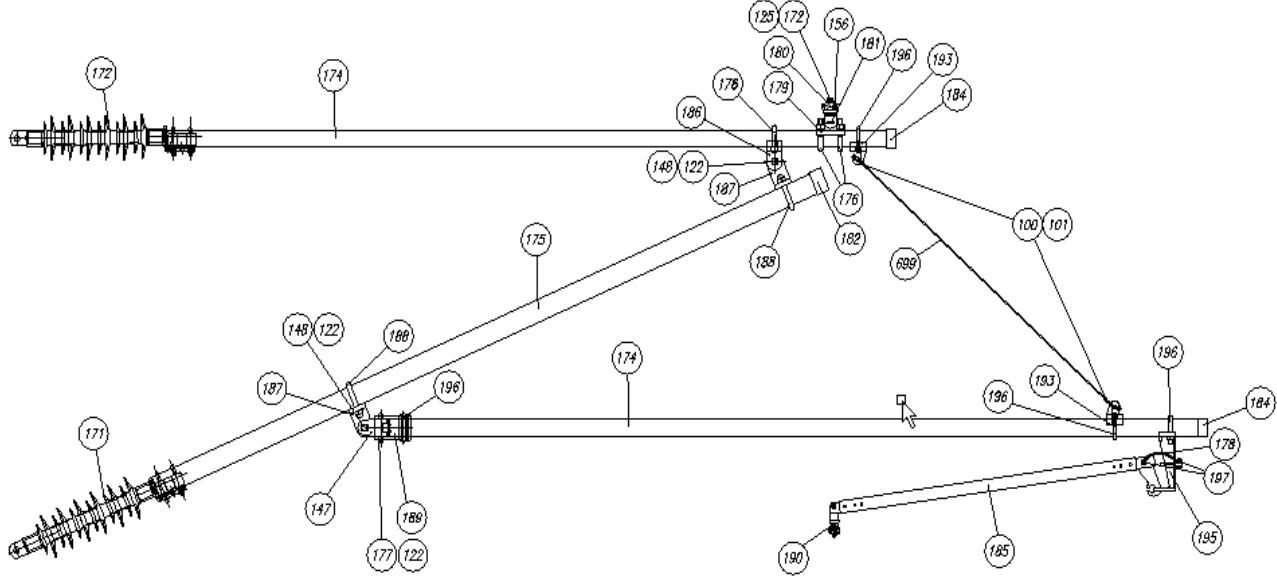


KOD / CODE	PARÇA İSİMLERİ / CONCEPT	Adet/Un.
122	KUPİLYA / SPLIT PIN	5
125	CİVATA DIN 933 12X30 A2 INOX / SCREW DIN 933 12X30 A2 STAINLESS	1
147	KONSOL HOBAN AYAĞI HAREKETLİ PARÇA İKİ KULAK / BOTTON TOP / SWIVEL TWO CLEVIS	1
148	PİM TİP 2 / PIN TYPE 2	4
156	Cu-AI KOL. KABLO ASKI KLEMENSİ İÇİN / Cu-AI SLEEVE FOR SUSPENSION CLAMP	1
171	SİLİKON İZOLATÖR KONSOL BORU İÇİN ,70 / SILICONE INSULATOR FOR CANTILEVER TUBE, 70	1
172	SİLİKON İZOLATÖR HOBAN BORU İÇİN ,55 / SILICONE INSULATOR FOR TOP TUBE, 55	1
173	ALÜMİNYUM BORU Ø 42 / ALUMINIUM TUBE Ø42	0,6
174	ALÜMİNYUM BORU Ø 55 / ALUMINIUM TUBE Ø 55	4,1
175	ALÜMİNYUM BORU Ø 70 / ALUMINIUM TUBE Ø 70	2,6
176	U-BOLT 16X76 - A88 -R30	4
177	PİM TİP 12 / PIN TYPE 12	1
178	BESLEME BAĞLANTISI / EQUIPOTENTIAL CONECTION INCLUDING LUGD	1
179	PORTÖR TELİ GRİFİ - KONSOL BORU BAĞLANTI 55 / SUSPENSION CLAMP TO TOP TUBE	1
180	P-120 TAŞIYICI TEL KLEMENSİ / GS-1 AND MW LINK CLAMP	1
181	PİM / PIN	1
182	KONSOL BORU TAPASI 70 / CANTILEVER TUBE PLUG 70	1
184	HOBAN - ANTİBALANSAN BORU TAPASI 55 / TOP TUBE PLUG 55	2
185	KOMPLE RAPEL L = 1150 mm / WHOLE STEADY ARM L = 1150 mm	1
186	HOBAN 55 BORU BAĞLANTI PARÇASI / TOP TUBE 55/70 - SUPPORT TUBE LINK	1
187	KONSOL BAĞLANTI PARÇASI BORU 70 ANTİBALANSANA / CLAMP CANTILEVER TUBE 70 LINK TO REGISTRATION	4
188	U-BOLT 16X110 -A88-R30	3
189	ANTİBALANSAN BORU 55 BAŞLIĞI / REGISTRATION TUBE 55 HEAD	1
190	RAPEL GRİFİ KOMPLE / STEADY CLAMP FOR CONTACT WIRE	1
191	U-BOLT 12X72-A57-R25	2
192	DIAGONAL BORU BAŞLIĞI , 42 / DIAGONAL TUBE HEAD ,42	2
195	SABİT KOL KAYAR KONSOL / STEADY ARM SLIDING SUPPORT	1
196	U-BOLT 12X78-A68-R25	2
197	CİVATA 10X35 / SCREW 10X35	2
272	DÜZ RONDELA DIN 125 M12 -A2 INOX / FLAT WASHER DIN 125 M12 -A2 INOX	1



TEP - 004

**BASIYA ÇALIŞAN KONSOL SETİ**  
**OUTWARDS CANTILEVER**

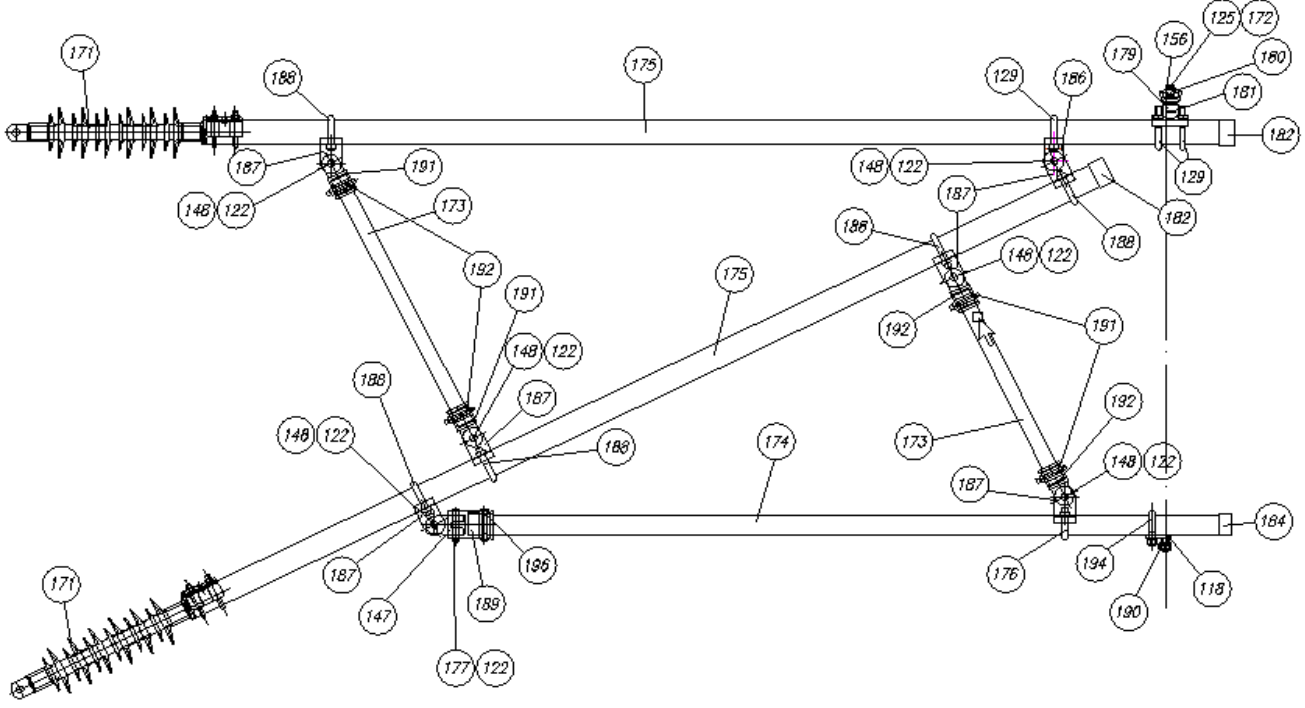


KOD / CODE	PARÇA İSİMLERİ / CONCEPT	Adet/Un.
122	KUPİLYA / SPLIT PIN	3
125	ÇİVATA DIN 933 12X30 A2 INOX / SCREW DIN 933 12X30 A2 STAINLESS	1
147	KONSOL HOBAN AYAĞI HAREKETLİ PARÇA İKİ KULAK / BOTTON TOP / SWIVEL TWO CLEVIS	1
148	PİM TİP 2 / PIN TYPE 2	2
156	Cu-AI KOL. KABLO ASKI KLEMENSİ İÇİN / Cu-AI SLEEVE FOR SUSPENSION CLAMP	1
171	SİLİKON İZOLATÖR KONSOL BORU İÇİN ,70 / SILICONE INSULATOR FOR CANTILEVER TUBE, 70	1
172	SİLİKON İZOLATÖR HOBAN BORU İÇİN ,55 / SILICONE INSULATOR FOR TOP TUBE, 55	1
174	ALÜMİNYUM BORU Ø 55 / ALUMINIUM TUBE Ø 55	5,6
175	ALÜMİNYUM BORU Ø 70 / ALUMINIUM TUBE Ø 70	2,6
176	U-BOLT 16X76 - A88 -R30	3
177	PİM TİP 12 / PIN TYPE 12	1
178	BESLEME BAĞLANTISI / EQUIPOTENTIAL CONECTION INCLUDING LUGD	1
179	PORTÖR TELİ GRİFİ - KONSOL BORU BAĞLANTI 55 / SUSPENSION CLAMP TO TOP TUBE	1
180	P-120 TAŞIYICI TEL KLEMENSİ / GS-1 AND MW LINK CLAMP	1
181	PİM / PIN	1
182	KONSOL BORU TAPASI 70 / CANTILEVER TUBE PLUG 70	1
184	HOBAN - ANTİBALANSAN BORU TAPASI 55 / TOP TUBE PLUG 55	2
185	KOMPLE RAPEL L = 1150 mm / WHOLE STEADY ARM L = 1150 mm	1
186	HOBAN 55 BORU BAĞLANTI PARÇASI / TOP TUBE 55/70 - SUPPORT TUBE LINK	1
187	KONSOL BAĞLANTI PARÇASI BORU 70 ANTİBALANSANA / CLAMP CANTILEVER TUBE 70 LINK TO REGISTRATION	2
188	U-BOLT 16X110 -A88-R30	2
189	ANTİBALANSAN BORU 55 BAŞLIĞI / REGISTRATION TUBE 55 HEAD	1
190	RAPEL GRİFİ KOMPLE / STEADY CLAMP FOR CONTACT WIRE	1
193	PANDÜL İÇİN ANTİBALANSAN BORU ASKISI 52-55 / SUSPENSION DROPPER HOOK FOR P-20, TUBE 55-42	2
195	SABİT KOL KAYAR KONSOL / STEADY ARM SLIDING SUPPORT	1
196	U-BOLT 12X78-A68-R25	4
197	ÇİVATA 10X35 / SCREW 10X35	2
199	KABLO P-2 İÇİN / M.CABLE FOR P-20	1
200	YÜKSÜK ANTİBALANSAN BORU PANDÜL İÇİN / THIMBLE FOR SUSPENSION DROPPER P-20	2
201	ÇELİK KABLO 20 mm <sup>2</sup> SIKIŞTIRMA PARÇASI / SLEEVE FOR AC 20 mm <sup>2</sup> WIRE	2
272	DÜZ RONDELA DIN 125 M12 -A2 INOX / FLAT WASHER DIN 125 M12 -A2 INOX	1



TEP - 018

## YÜKSELEN KATENER İÇİN KONSOL-HOBAN SETİ OUT OF RUNNING CANTILEVER

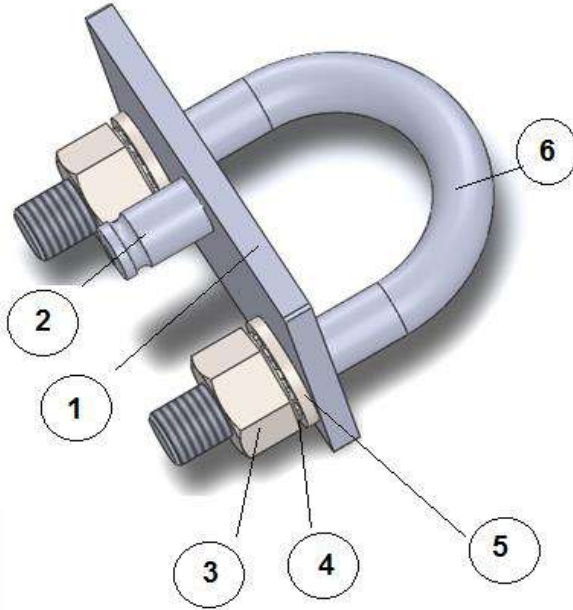
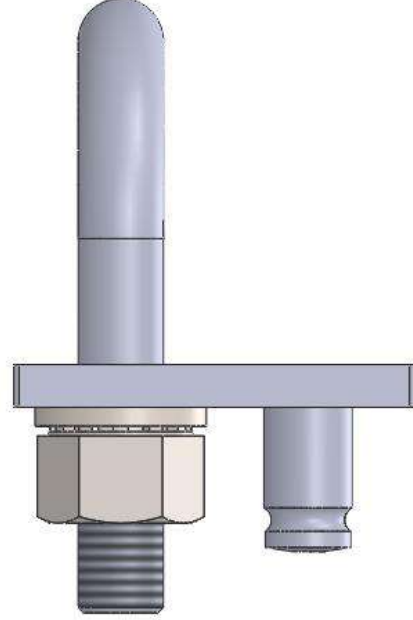
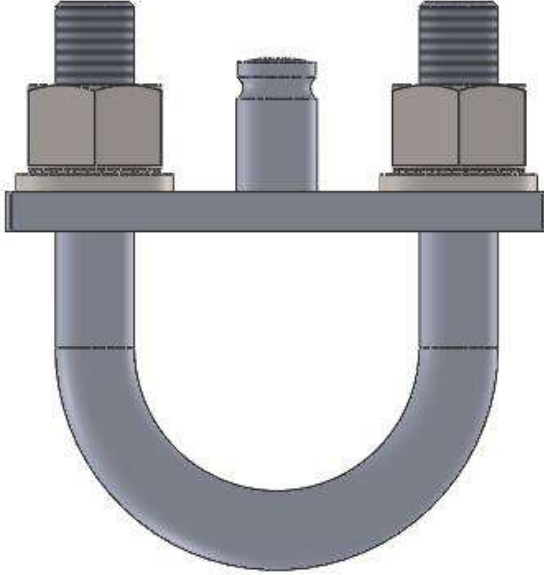


KOD / CODE	PARÇA İSİMLERİ / CONCEPT	Adet/Un.
118	ANTİBALANSANA SEYİR TELİ BAĞLANTI PARÇASI / OUT OF RUN CLAMP FOR CONTACT WIRE	1
122	KUPİLYA / SPLIT PIN	7
125	CİVATA DIN 933 12X30 A2 INOX / SCREW DIN 933 12X30 A2 STAINLESS	1
147	KONSOL HOBAN AYAĞI HAREKETLİ PARÇA İKİ KULAK / BOTTON TOP / SWIVEL TWO CLEVIS	1
148	PİM TİP 2 / PIN TYPE 2	6
156	Cu-AI KOL. KABLO ASKI KLEMENSİ İÇİN / Cu-AI SLEEVE FOR SUSPENSION CLAMP	1
171	SİLİKON İZOLATÖR KONSOL BORU İÇİN ,70 / SILICONE INSULATOR FOR CANTILEVER TUBE, 70	2
173	ALÜMİNYUM BORU Ø 42 / ALUMINIUM TUBE Ø42	1,5
174	ALÜMİNYUM BORU Ø 55 / ALUMINIUM TUBE Ø 55	2,1
175	ALÜMİNYUM BORU Ø 70 / ALUMINIUM TUBE Ø 70	5,7
176	U-BOLT 16X76 - A88 -R30	1
177	PİM TİP 12 / PIN TYPE 12	1
179	PORTÖR TELİ GRİFİ - KONSOL BORU BAĞLANTI 55 / SUSPENSION CLAMP TO TOP TUBE	1
180	P-120 TAŞIYICI TEL KLEMENSİ / GS-1 AND MW LINK CLAMP	1
181	PİM / PIN	1
182	KONSOL BORU TAPASI 70 / CANTILEVER TUBE PLUG 70	2
184	HOBAN - ANTİBALANSAN BORU TAPASI 55 / TOP TUBE PLUG 55	1
186	HOBAN 55/70 BORU BAĞLANTI PARÇASI / TOP TUBE 55/70 - SUPPORT TUBE LINK	1
187	KONSOL BAĞLANTI PARÇASI BORU 70 ANTİBALANSANA / CLAMP CANTILEVER TUBE 70 LINK TO REGISTRATION	6
188	U-BOLT 16X110 -A88-R30	5
189	ANTİBALANSAN BORU 55 BAŞLIĞI / REGISTRATION TUBE 55 HEAD	1
190	RAPEL GRİFİ KOMPLE / STEADY CLAMP FOR CONTACT WIRE	1
191	U-BOLT 12X72-A57-R25	4
192	DIAGONAL BORU BAŞLIĞI , 42 / DIAGONAL TUBE HEAD ,42	4
194	U-BOLT 16X90 A74	1
196	U-BOLT 12X78 -A68- R25	1
229	U-BOLT 16X95-A88-R30	2
272	DÜZ RONDELA DIN 125 M12 -A2 INOX / FLAT WASHER DIN 125 M12 -A2 INOX	1



**TEP - 118**

**ANTİBALANSANA SEYİR TELİ BAĞLANTI PARÇASI**  
**OUT OF RUN CLAMP FOR CONTACT WIRE**

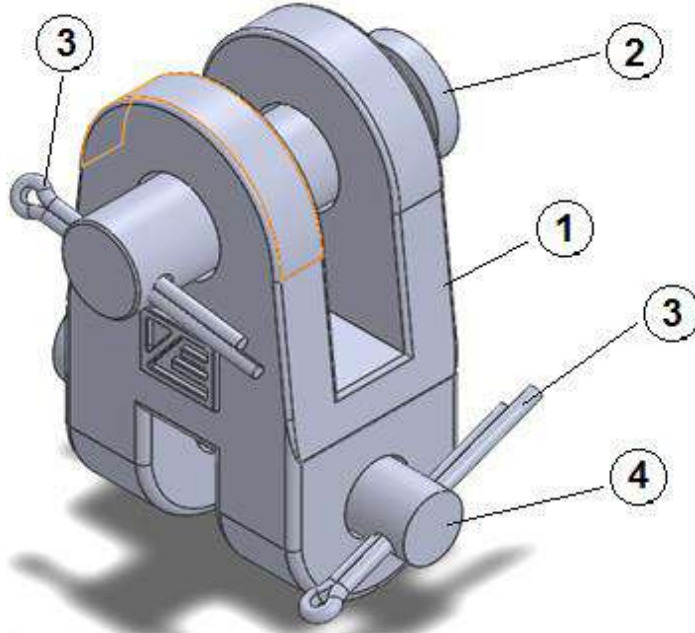
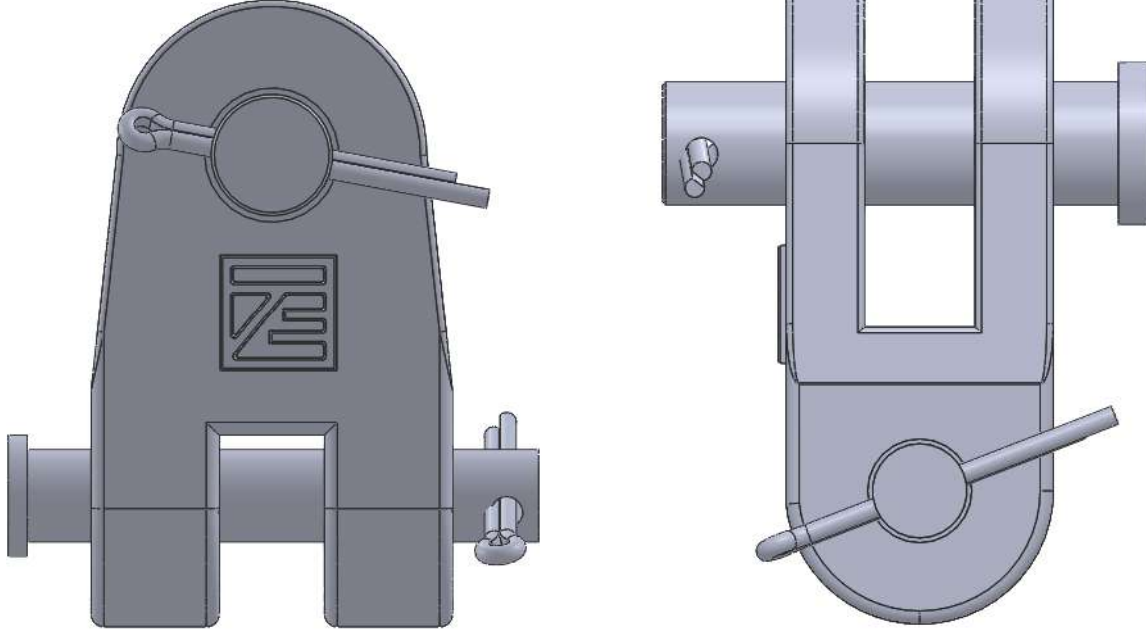


6	TEP-194	U-Civata / U-Bolt	Paslanmaz Çelik / Stainless Steel	1
5		Pul / Washer	Paslanmaz Çelik / Stainless Steel	2
4		Yaylı Rondela / Spring Washer	Paslanmaz Çelik / Stainless Steel	2
3		Somun / Nuts	Paslanmaz Çelik / Stainless Steel	2
2		Pim /Pın	Paslanmaz Çelik / Stainless Steel	1
1	TEP-118	Gövde / Body	Paslanmaz Çelik / Stainless Steel	1
<b>No.</b>	<b>Parça No. / Part No.</b>	<b>Açıklama / Description</b>	<b>Malzeme / Matreial</b>	<b>Adet / Quantity</b>



TEP - 147

**KONSOL HOBAN AYAĞI HAREKETLİ PARÇA**  
**BOTTOM TOP SWIVEL TWO CLEVIS**

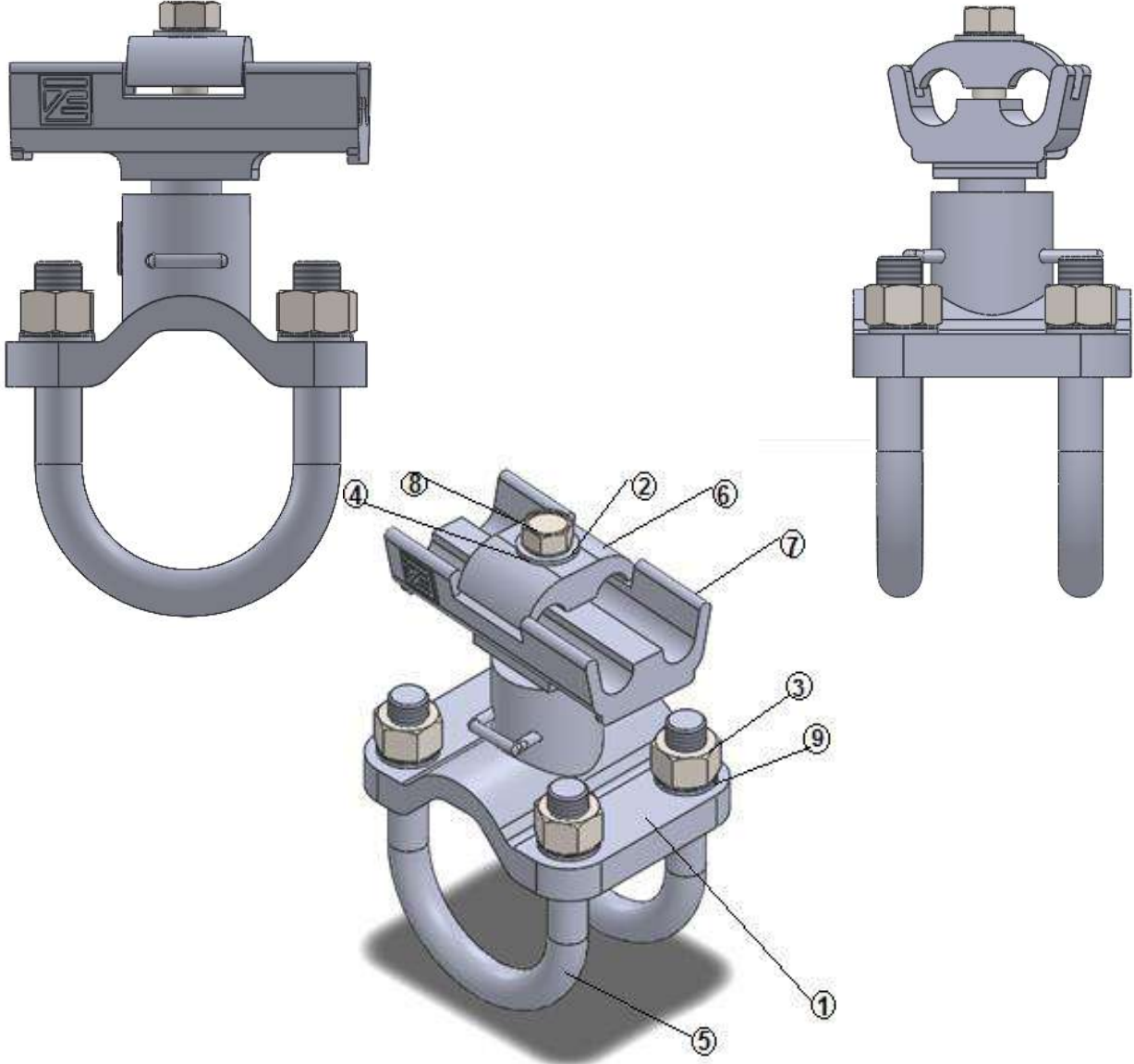


4	TEP-177	Pim / Pin	Paslanmaz Çelik / Stainless Steel	1
3	TEP-122	Gupilya / Split Pin	Paslanmaz Çelik / Stainless Steel	2
2	TEP-148	Pim / Pin	Paslanmaz Çelik / Stainless Steel	1
1	TEP-147	Gövde / Body	Alüminyum Alaşım Döküm / Cast Aluminium	1
<b>No.</b>	<b>Parça No. / Part No.</b>	<b>Açıklama / Description</b>	<b>Malzeme / Matreial</b>	<b>Adet / Quantity</b>



TEP - 179

PORTÖR TELİ TAŞIYICI / KONSOL BORU BAĞLANTISI  
SUSPENSION CLAMP TO TOP TUBE



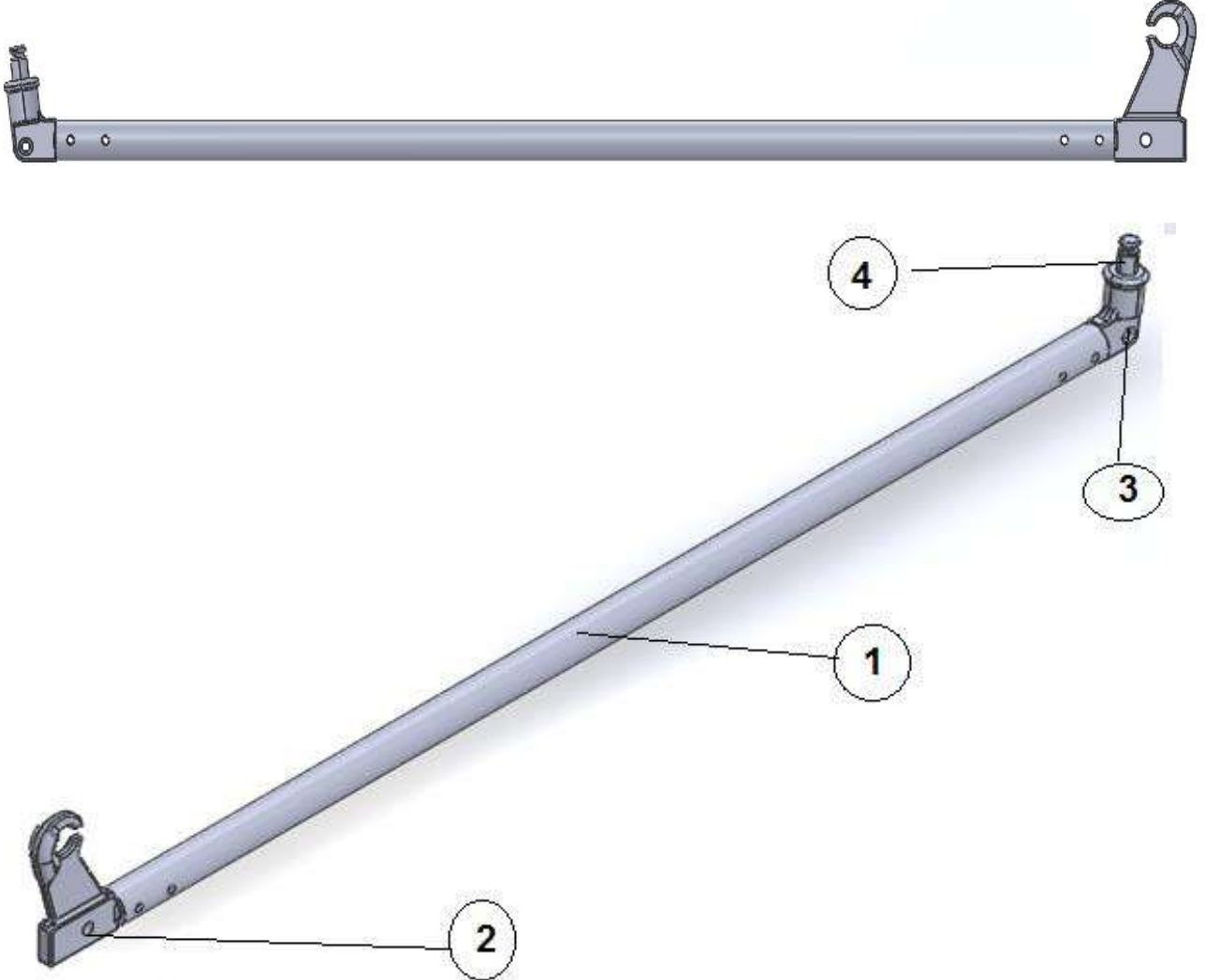
9		Yaylı Rondela / Spring Washer	Paslanmaz Çelik / Stainless Steel	4
8	TEP-125	Cıvata /Screw	Paslanmaz Çelik / Stainless Steel	1
7	TEP-180	Taşıyıcı Tel Klemensi / MW Link Clamp	Alüminyum Alaşım Döküm / Cast Aluminium Alloy	1
6	TEP-180	Klemens Papucu / Clamp Shoe	Alüminyum Alaşım Döküm / Cast Aluminium Alloy	1
5	TEP-229	U-Civata / U-Bolt	Paslanmaz Çelik / Stainless Steel	2
4		Yaylı Rondela / Spring Washer	Paslanmaz Çelik / Stainless Steel	1
3		Somun / Nuts	Paslanmaz Çelik / Stainless Steel	4
2	TEP-272	Pul / Washer	Paslanmaz Çelik / Stainless Steel	1
1	TEP-179	Gövde / Body	Alüminyum Alaşım Döküm / Cast Aluminium Alloy	1
<b>No.</b>	<b>Parça No. / Part No.</b>	<b>Açıklama / Description</b>	<b>Malzeme / Material</b>	<b>Adet / Quantity</b>





**TEP - 185**

**KOMPLE RAPEL**  
**WHOLE STEADY ARM**

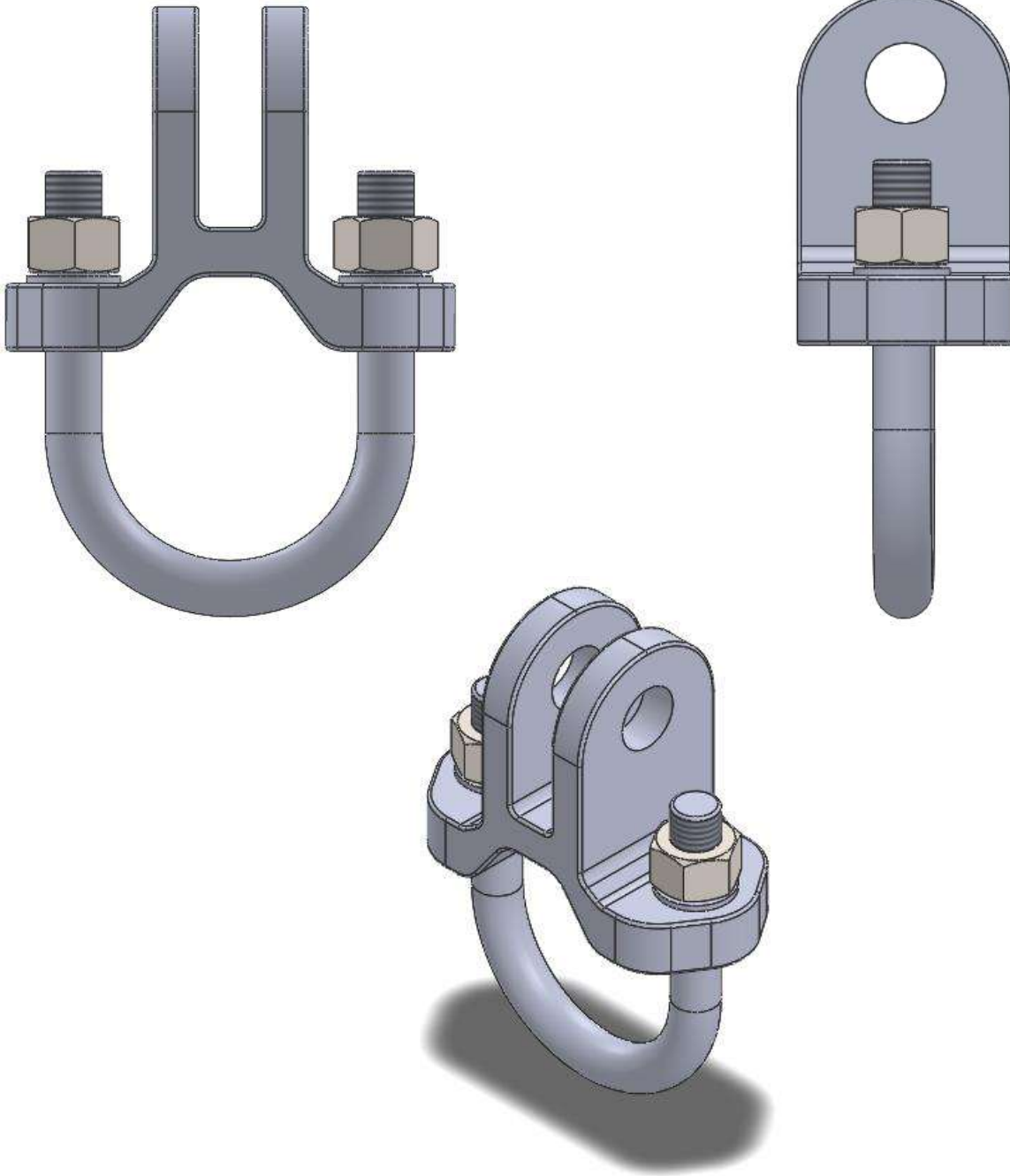


4	TEP-04-185	Seyir Teli Grifi Pimi / Contact Wire Clamp Pin	Paslanmaz Çelik / Stainless Steel	1
3	TEP-03-185	Kol Destek Bağlantısı / Arm Fixing Bracing	Alüminyum Alaşım Döküm / Cast Aluminium Alloy	1
2	TEP-02-185	Askı Kolu / Hook Arm Bracing	Alüminyum Alaşım Döküm / Cast Aluminium Alloy	1
1	TEP-01-185	Gövde / Body	Alüminyum Alaşım/ Aluminium Alloy	1
<b>No.</b>	<b>Parça No. / Part No.</b>	<b>Açıklama / Description</b>	<b>Malzeme / Matreial</b>	<b>Adet / Quantity</b>



**TEP - 186**

**HOBAN 55-70 BORU BAĞLANTI PARÇASI**  
**TOP TUBE 55-70 SUPPORT TUBE LINK**

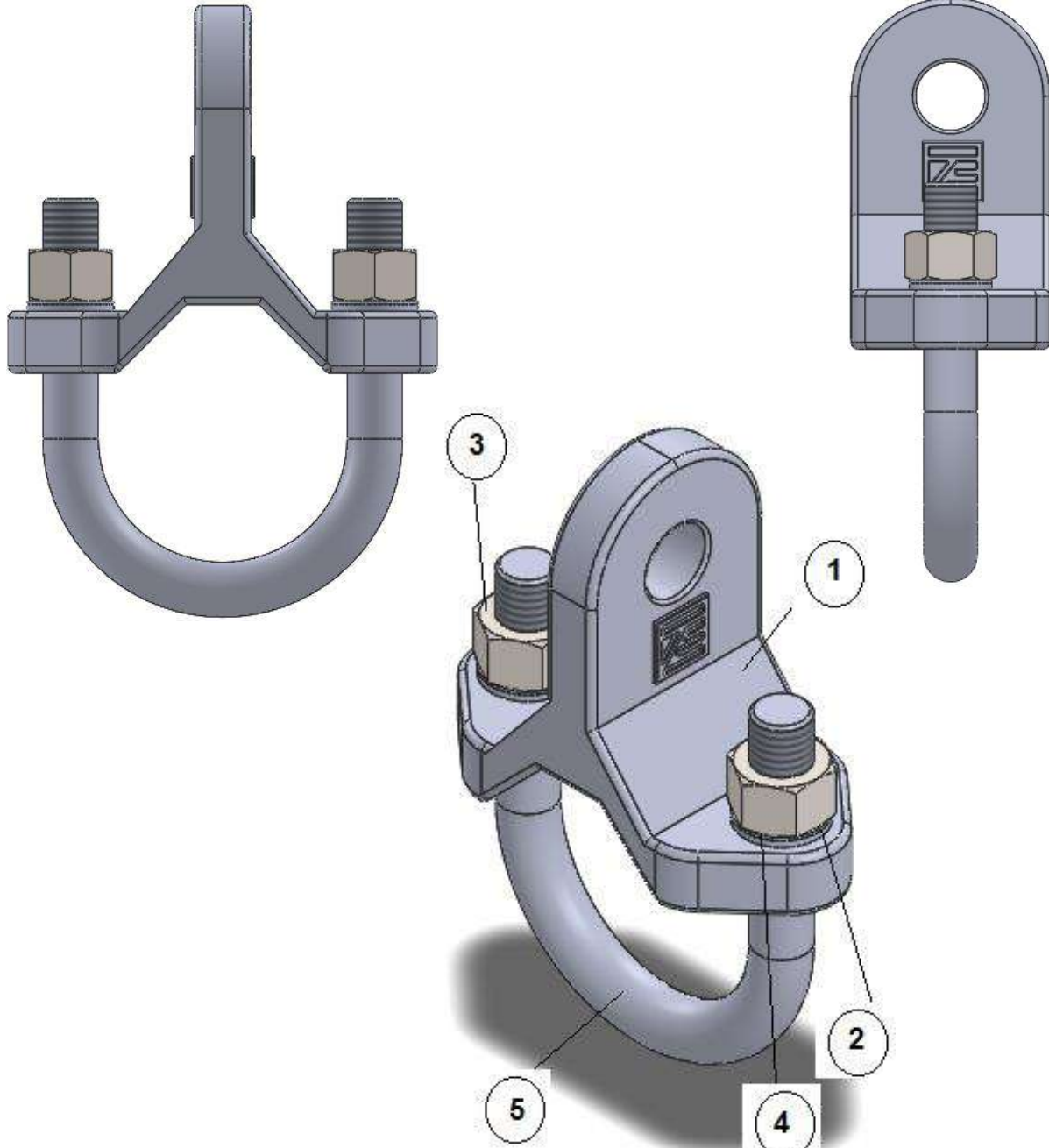


5	TEP-176	U-Civata / U-Bolt	Paslanmaz Çelik / Stainless Steel	1
4		Yaylı Rondela / Spring Washer	Paslanmaz Çelik / Stainless Steel	2
3		Somun / Nuts	Paslanmaz Çelik / Stainless Steel	2
2		Pul / Washer	Paslanmaz Çelik / Stainless Steel	2
1	TEP-186	Gövde / Body	Alüminyum Alaşım Döküm / Cast Aluminium Alloy	1
No.	Parça No. / Part No.	Açıklama / Description	Malzeme / Matreial	Adet / Quantity



**TEP - 187**

**KONSOL BORU BAĞLANTI PARÇASI BORU 70 mm ANTİBALANSANA**  
**CLAMP CANTILEVER TUBE 70 mm LINK TO REGISTRATION**

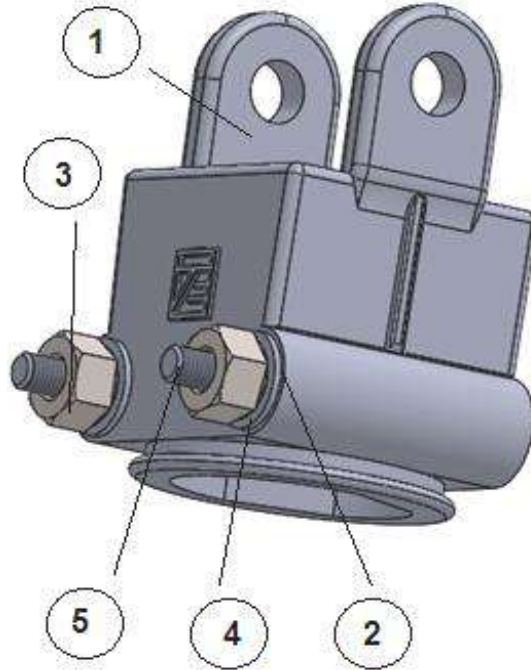
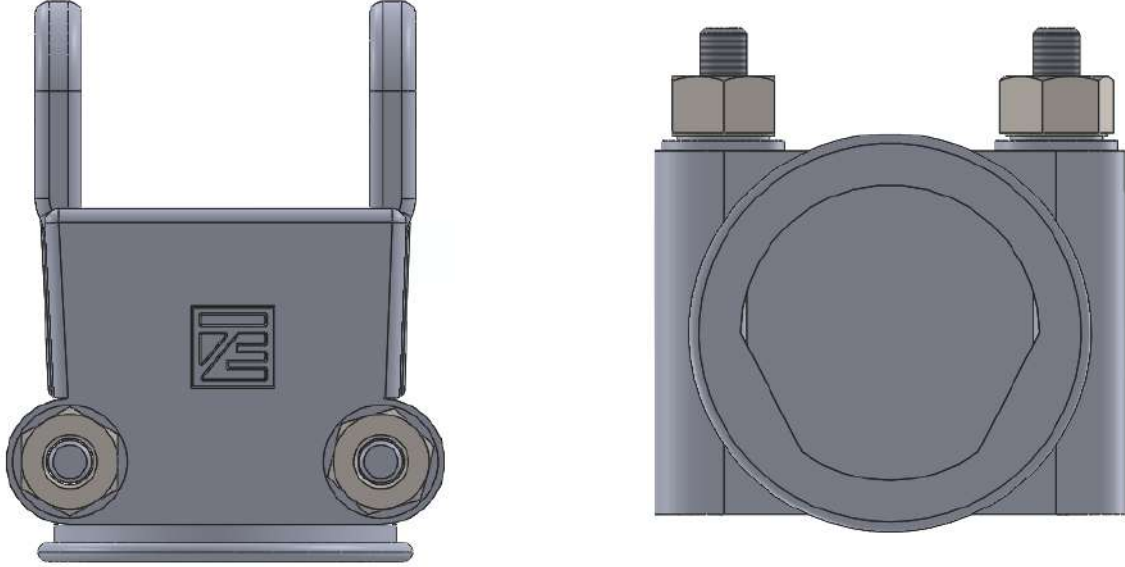


5	TEP-188	U-Civata / U-Bolt	Paslanmaz Çelik / Stainless Steel	1
4		Yaylı Rondela / Spring Washer	Paslanmaz Çelik / Stainless Steel	2
3		Somun / Nuts	Paslanmaz Çelik / Stainless Steel	2
2		Pul / Washer	Paslanmaz Çelik / Stainless Steel	2
1	TEP-187	Gövde / Body	Alüminyum Alaşım Döküm / Cast Aluminium Alloy	1
<b>No.</b>	<b>Parça No. / Part No.</b>	<b>Açıklama / Description</b>	<b>Malzeme / Matreial</b>	<b>Adet / Quantity</b>



**TEP - 189**

**ANTİBALANSAN BORU BAŞLIĞI**  
**REGISTRATION TUBE HEAD**

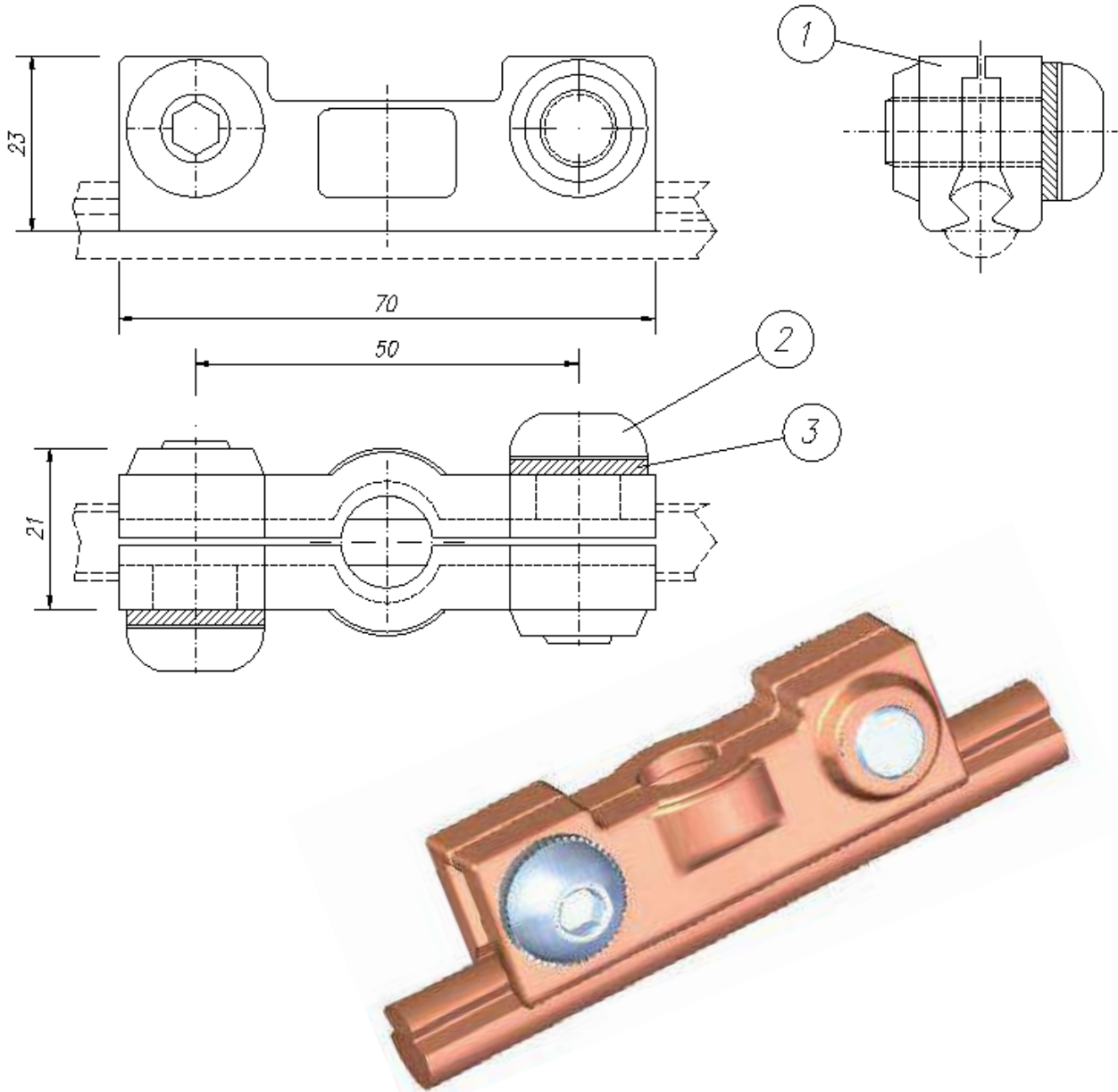


5	TE-196	U-Civata / U-Bolt	Paslanmaz Çelik / Stainless Steel	1
4		Yaylı Rondela / Spring Washer	Paslanmaz Çelik / Stainless Steel	2
3		Somun / Nuts	Paslanmaz Çelik / Stainless Steel	2
2		Pul / Washer	Paslanmaz Çelik / Stainless Steel	2
1	TE-189	Gövde / Body	Alüminyum Alaşım Döküm / Cast Aluminium Alloy	1
<b>No.</b>	<b>Parça No. / Part No.</b>	<b>Açıklama / Description</b>	<b>Malzeme / Matreial</b>	<b>Adet / Quantity</b>



TEP - 190

**RAPEL GRİFİ KOMPLE**  
**STEADY CLAMP FOR CONTACT WIRE**

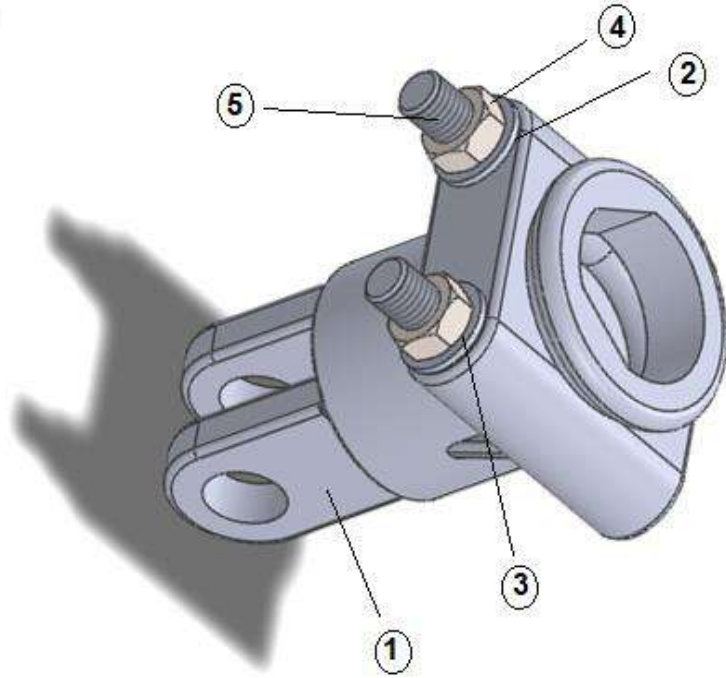
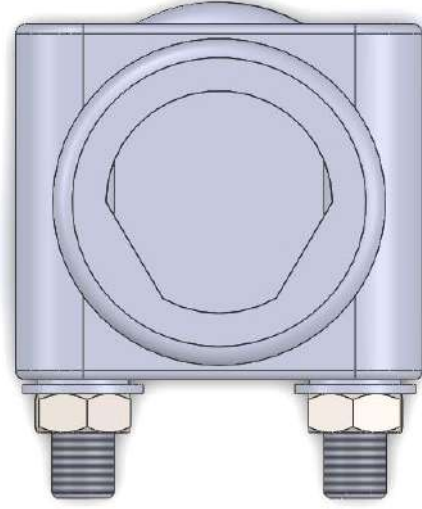
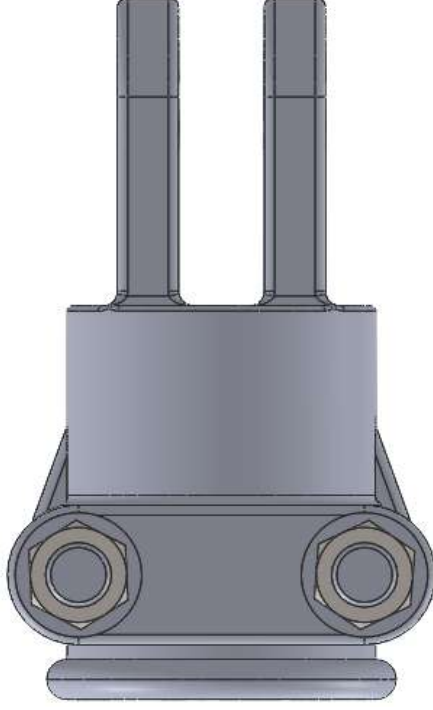


3		RONDELA / PIPS WASHER	Paslanmaz Çelik / Stainless Steel	2
2		CİVATA / BOLT	Paslanmaz Çelik / Stainless Steel	2
1	TEP-01-190	GRİF YARIM GÖVDE / GRIF HALF-BODY	CuNi2Si( CW111C )	2
<b>No.</b>	<b>Parça No. / Part No.</b>	<b>Açıklama / Description</b>	<b>Malzeme / Matreial</b>	<b>Adet / Quantity</b>



TEP - 192

**KÖŞE GENEL BORU KAPAĞI**  
**DIAGONAL TUBE HEAD 42 mm**

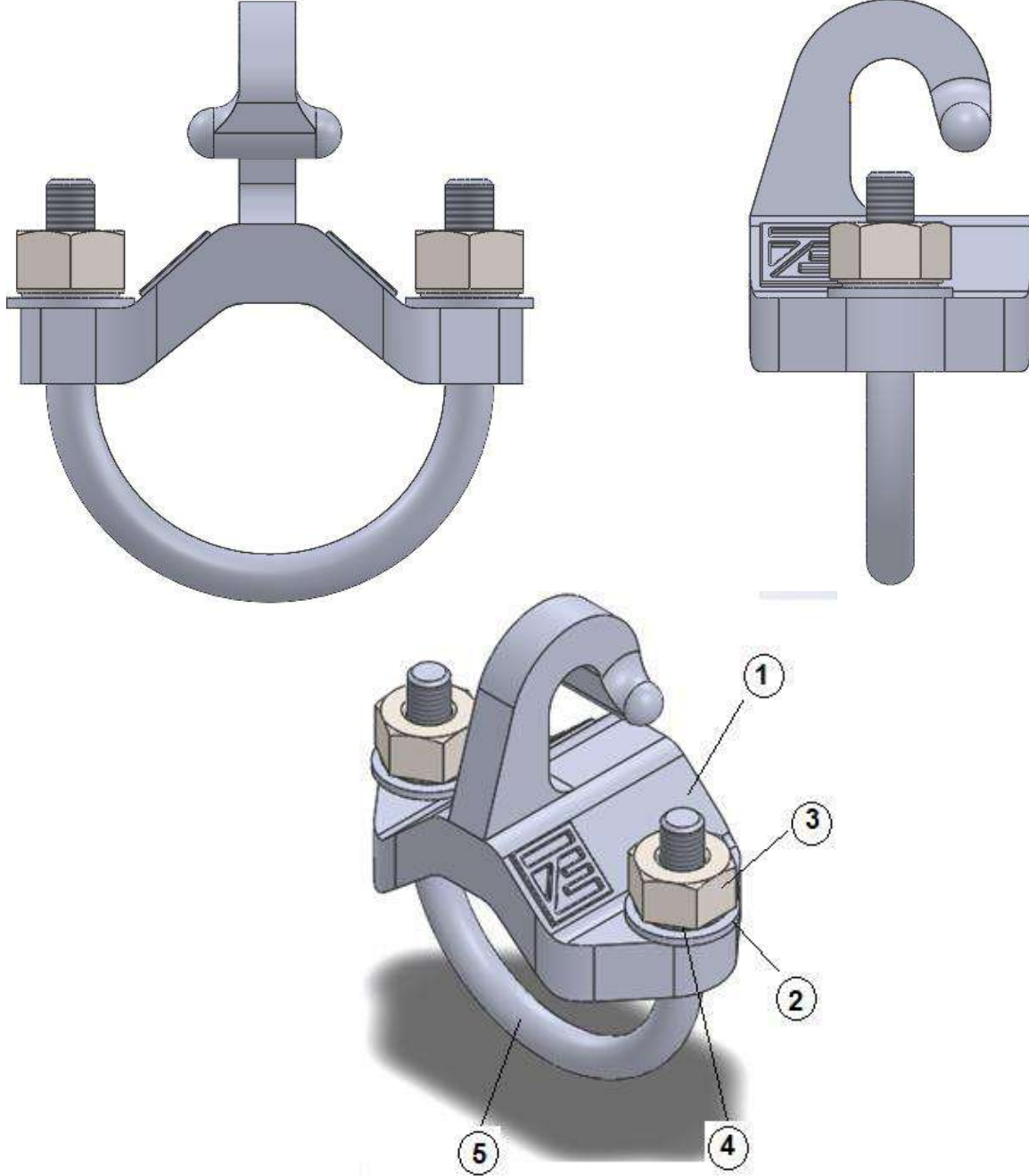


5	TEP-191	U-Civata / U-Bolt	Paslanmaz Çelik / Stainless Steel	1
4		Yaylı Rondela / Spring Washer	Paslanmaz Çelik / Stainless Steel	2
3		Somun / Nuts	Paslanmaz Çelik / Stainless Steel	2
2		Pul / Washer	Paslanmaz Çelik / Stainless Steel	2
1	TEP-192	Gövde / Body	Alüminyum Alaşım Döküm / Cast Aluminium	1
<b>No.</b>	<b>Parça No. / Part No.</b>	<b>Açıklama / Description</b>	<b>Malzeme / Matreial</b>	<b>Adet / Quantity</b>



**TEP - 193**

**PANDUL İÇİN ANTİBALANSAN BORU ASKISI**  
**SUSPENSION DROPPER HOOK FOR P-20**

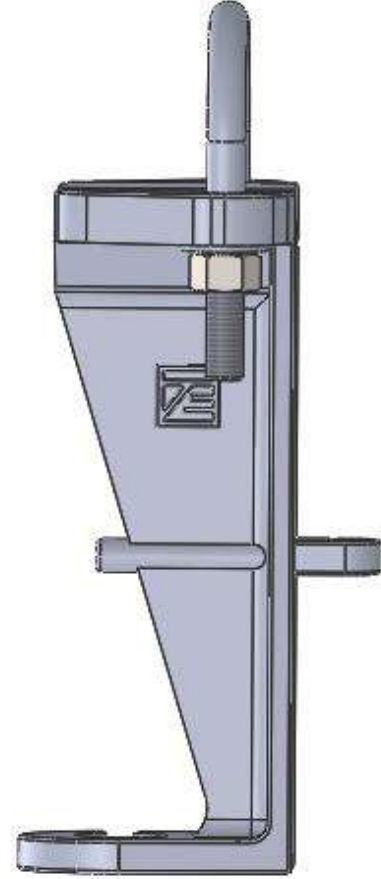
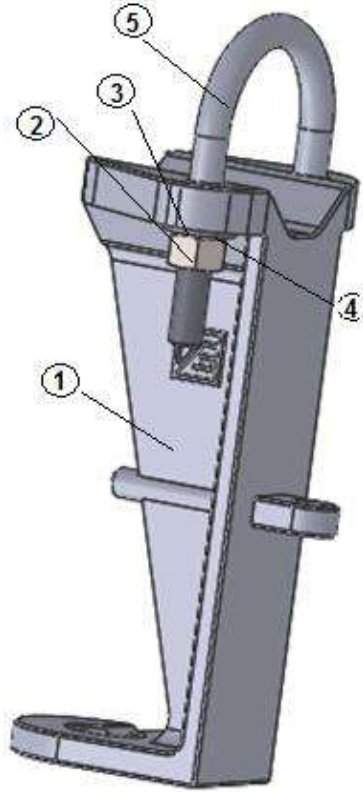
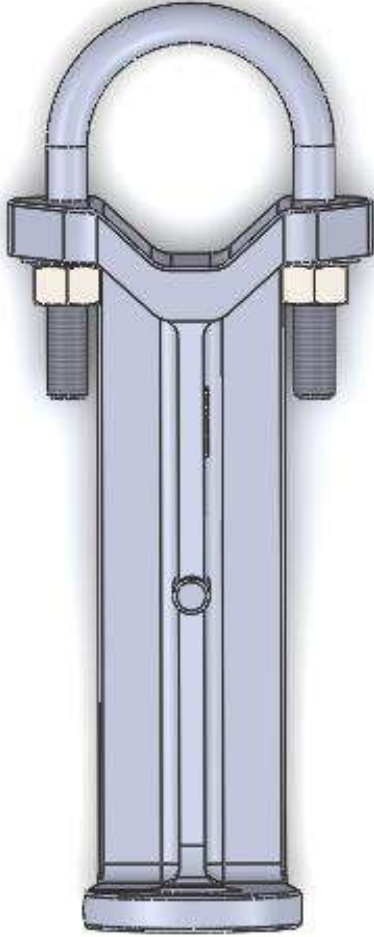


5	TEP-196	U-Civata / U-Bolt	Paslanmaz Çelik / Stainless Steel	1
4		Yaylı Rondela / Spring Washer	Paslanmaz Çelik / Stainless Steel	2
3		Somun / Nuts	Paslanmaz Çelik / Stainless Steel	2
2		Pul / Washer	Paslanmaz Çelik / Stainless Steel	2
1	TEP-193	Gövde / Body	Alüminyum Alaşım Döküm / Cast Aluminium	1
<b>No.</b>	<b>Parça No. / Part No.</b>	<b>Açıklama / Description</b>	<b>Malzeme / Matreial</b>	<b>Adet / Quantity</b>



TEP - 195

**SABİT KOL KAYAR KONSOL**  
**STEADY ARM SLIDING SUPPORT**



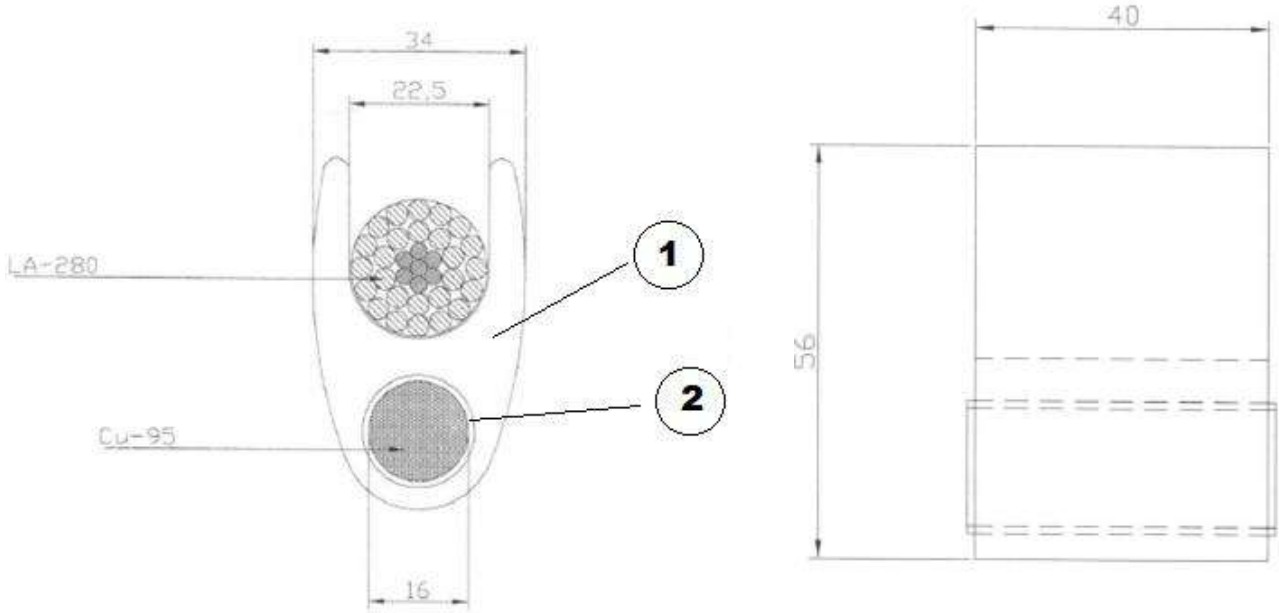
5	TEP-196	U-Civata / U-Bolt	Paslanmaz Çelik / Stainless Steel	1
4		Yaylı Rondela / Spring Washer	Paslanmaz Çelik / Stainless Steel	2
3		Pul / Washer	Paslanmaz Çelik / Stainless Steel	2
2		Somun / Nuts	Paslanmaz Çelik / Stainless Steel	2
1	TEP-195	Gövde / Body	Alüminyum Alaşım Döküm / Cast Aluminium Alloy	1
<b>No.</b>	<b>Parça No. / Part No.</b>	<b>Açıklama / Description</b>	<b>Malzeme / Matreial</b>	<b>Adet / Quantity</b>





TEP - 210

BAĞLANTI GRİFİ (LA-280-----Cu95)  
CONNECTION CLAMP

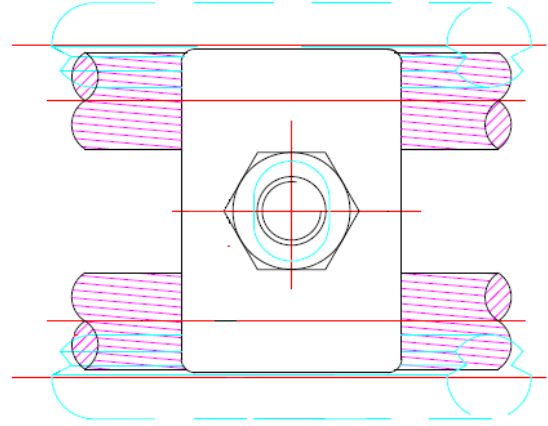
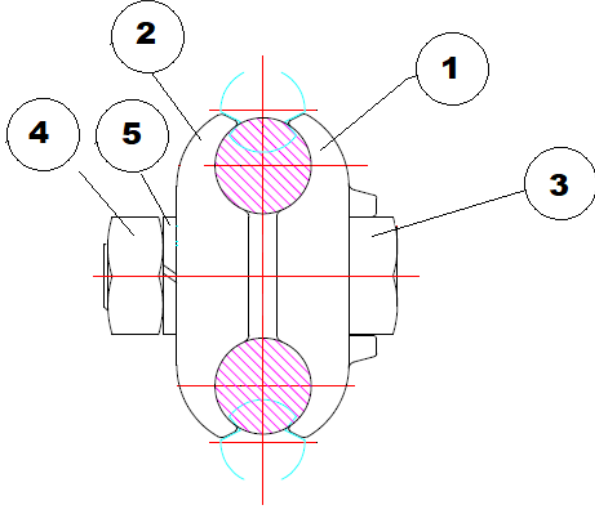


2		Bimetalik Parça / Bimetal Piece	70/30 Al-Cu	1
1		Gövde / Body	Alüminyum Alaşım / Aluminium Alloy	1
No.	Parça No. / Part No.	Açıklama / Description	Malzeme / Material	Adet / Quantity



TEP - 220

BESLEME TELİ GRİFİ (65-120mm<sup>2</sup>)  
ELECTRICAL CONNECTON CLAMP

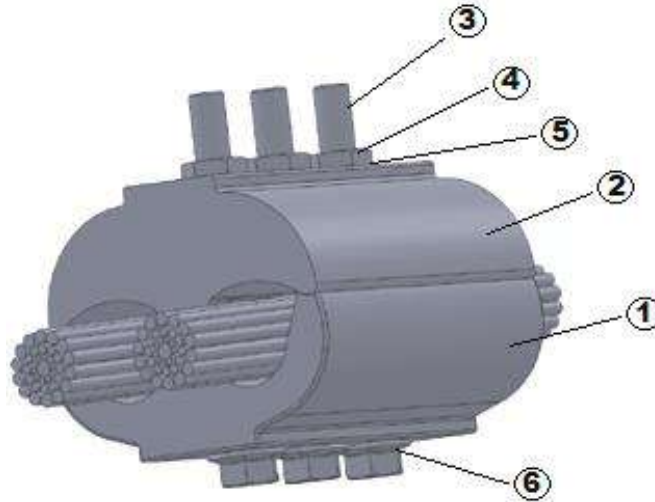
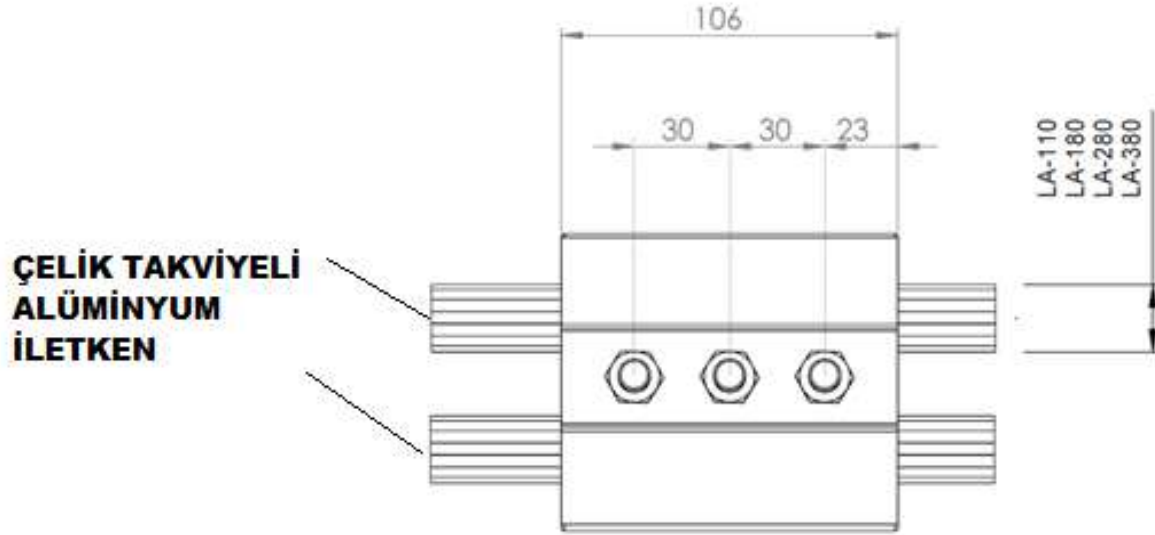


5		Yaylı Rondela / Spring Washer M10	Paslanmaz Çelik / Stainless Steel	1
4		Somun / Nuts M10	Paslanmaz Çelik / Stainless Steel	1
3		Civata /Screw M10X40	Paslanmaz Çelik / Stainless Steel	1
2		Alt Gövde / Body	CuNiSi	1
1		Üst Gövde / Body	CuNiSi	1
<b>No.</b>	<b>Parça No. / Part No.</b>	<b>Açıklama / Description</b>	<b>Malzeme / Material</b>	<b>Adet / Quantity</b>



TEP - 230

**ALÜMİNYUM İLETKENLER İÇİN PARELEL KLEMENS  
CONNECTION CLAMP**

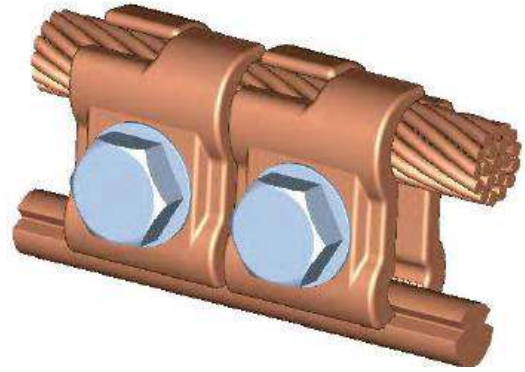
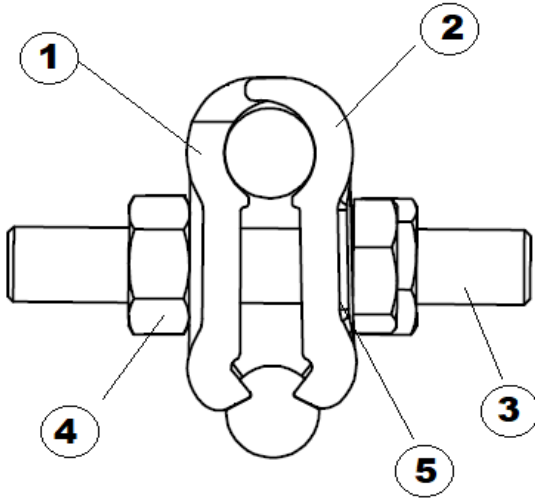
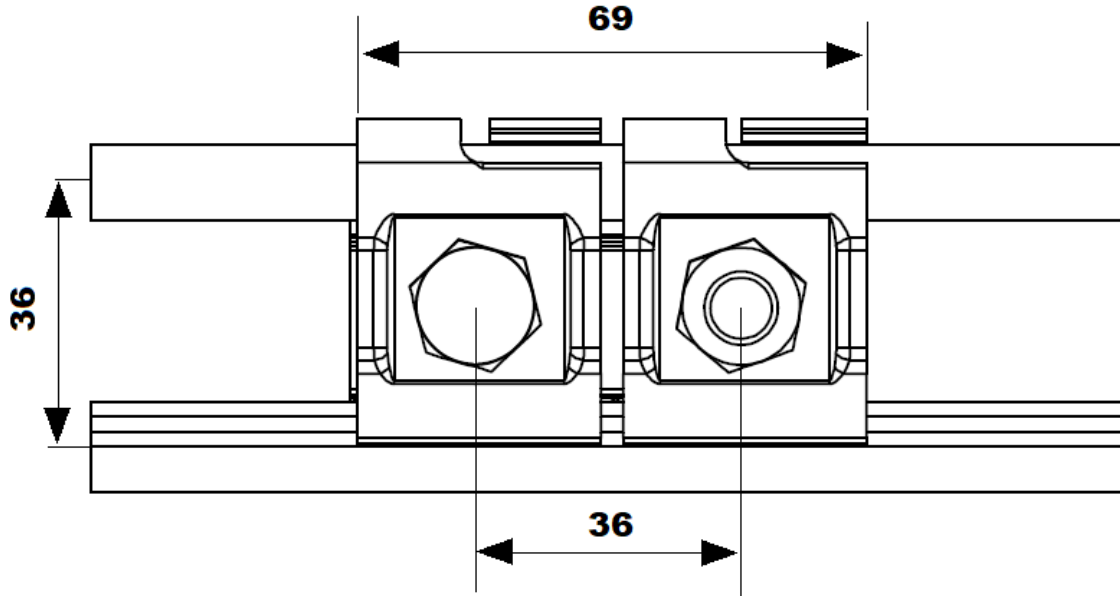


6		Düz Pul / Flat Washer M12	Paslanmaz Çelik / Stainless Steel	3
5		Yaylı Rondela / Spring Washer M12	Paslanmaz Çelik / Stainless Steel	3
4		Somun / Nuts M12	Paslanmaz Çelik / Stainless Steel	3
3		Civata /Screw M12X80	Paslanmaz Çelik / Stainless Steel	3
2		Klemens Papucu / Clamp Shoe	Alüminyum Alaşım Döküm / Cast Aluminium Alloy	1
1		Gövde / Body	Alüminyum Alaşım Döküm / Cast Aluminium Alloy	1
No.	Parça No. / Part No.	Açıklama / Description	Malzeme / Material	Adet / Quantity



TEP - 290

SEYİR TELİ BESLEME GRİFİ  
CONNECTION CLAMP

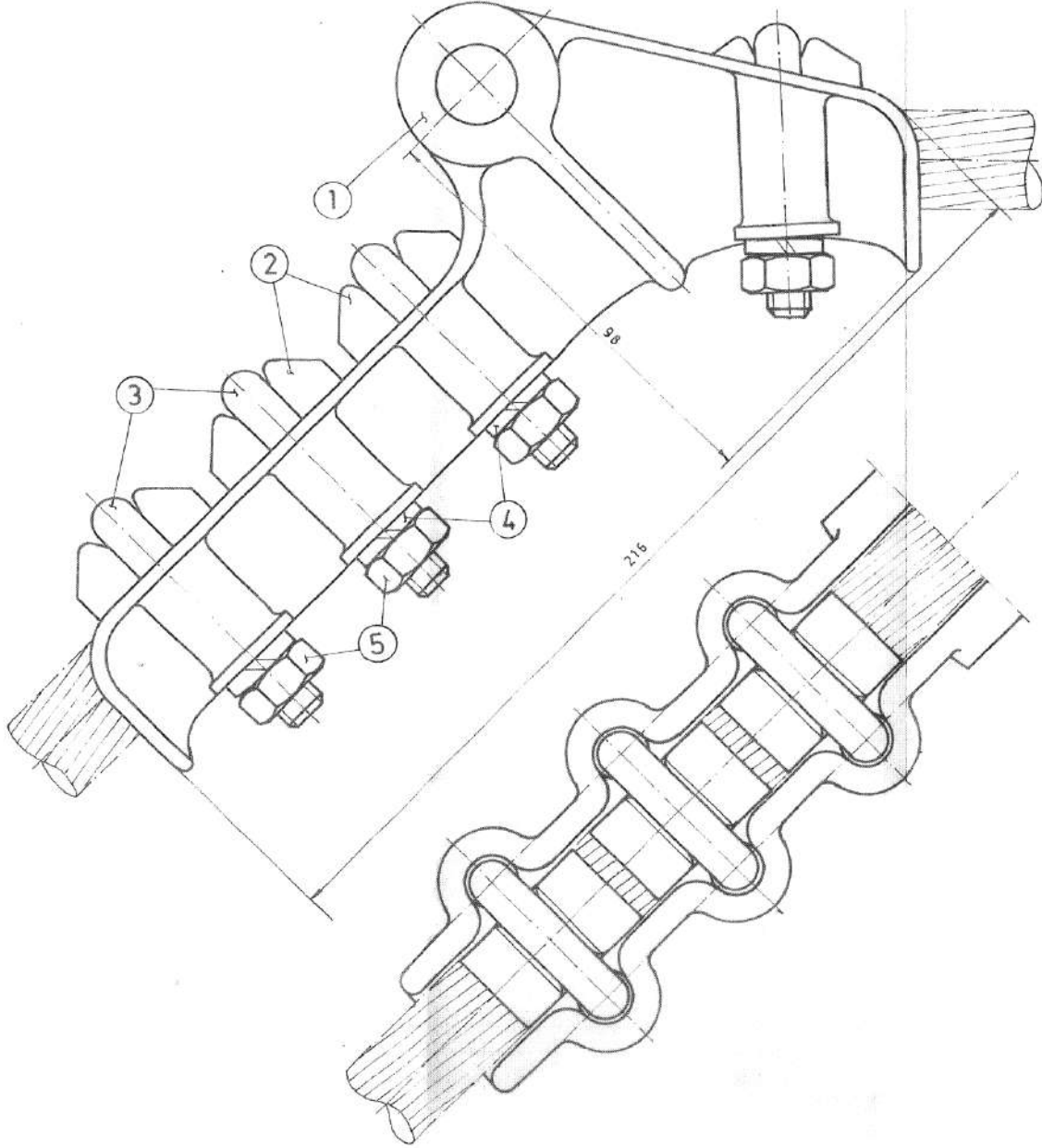


5		Yaylı Rondela / Spring Washer M10	Paslanmaz Çelik / Stainless Steel	2
4		Somun / Nuts M10	Paslanmaz Çelik / Stainless Steel	2
3		Civata /Screw M10X40	Paslanmaz Çelik / Stainless Steel	2
2		Klemens Papucu / Clamp Shoe	CuNiSi	2
1		Gövde / Body	CuNiSi	1
<b>No.</b>	<b>Parça No. / Part No.</b>	<b>Açıklama / Description</b>	<b>Malzeme / Material</b>	<b>Adet / Quantity</b>



TEP - 301

FİDER İLETKENİ UÇ MANŞONU  
FEEDER CONDUCTOR END SLEEVE

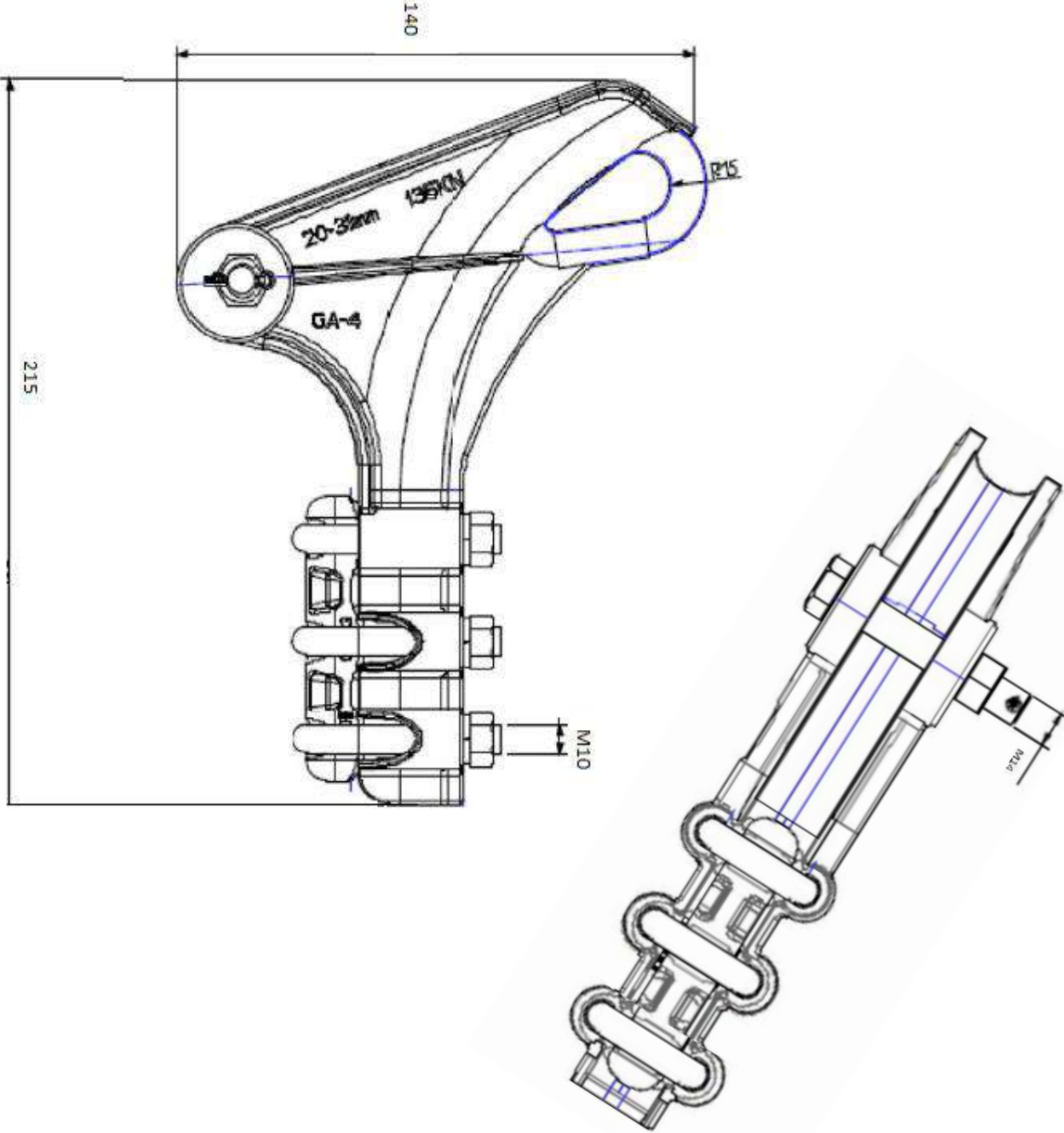


5		Yaylı Rondela / Spring Washer M10	Paslanmaz Çelik / Stainless Steel	8
4		Somun / Nuts M10	Paslanmaz Çelik / Stainless Steel	8
3		U- Civata / U-Bolt	Paslanmaz Çelik / Stainless Steel	4
2		Klemens Papucu / Clamp Shoe	GGG 40.3 / EN GJS 400-18	4
1		Gövde / Body	GGG 40.3 / EN GJS 400-18	1
No.	Parça No. / Part No.	Açıklama / Description	Malzeme / Material	Adet / Quantity



TEP - 302

LA 180 FİDER İLETKENİ UÇ MANŞONU  
LA 180 FEEDER CONDUCTOR END SLEEVE

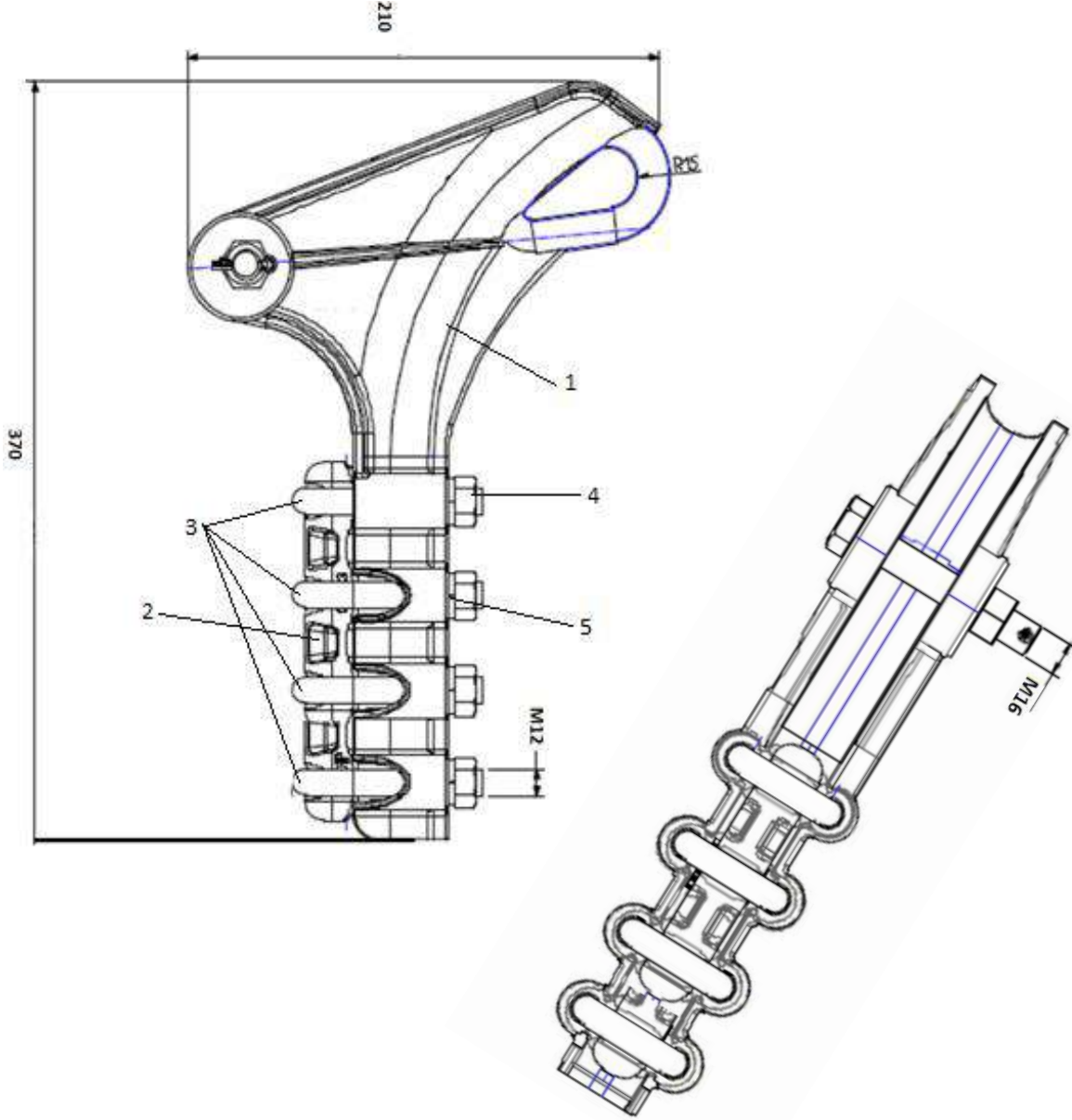


5		Yaylı Rondela / Spring Washer M10	Paslanmaz Çelik / Stainless Steel	6
4		Somun / Nuts M10	Paslanmaz Çelik / Stainless Steel	6
3		U- Civata / U-Bolt	Paslanmaz Çelik / Stainless Steel	3
2		Klemens Papucu / Clamp Shoe	Alüminyum Alaşım T6 / Alloy of Aluminum T6	1
1		Gövde / Body	Alüminyum Alaşım T6 / Alloy of Aluminum T6	1
		Pim / Pin	Çinko Kaplı Çelik / Zinc Coated Steel	1
<b>No.</b>	<b>Parça No. / Part No.</b>	<b>Açıklama / Description</b>	<b>Malzeme / Material</b>	<b>Adet / Quantity</b>



TEP - 303

LA 280 FİDER İLETKENİ UÇ MANŞONU  
LA 280 FEEDER CONDUCTOR END SLEEVE

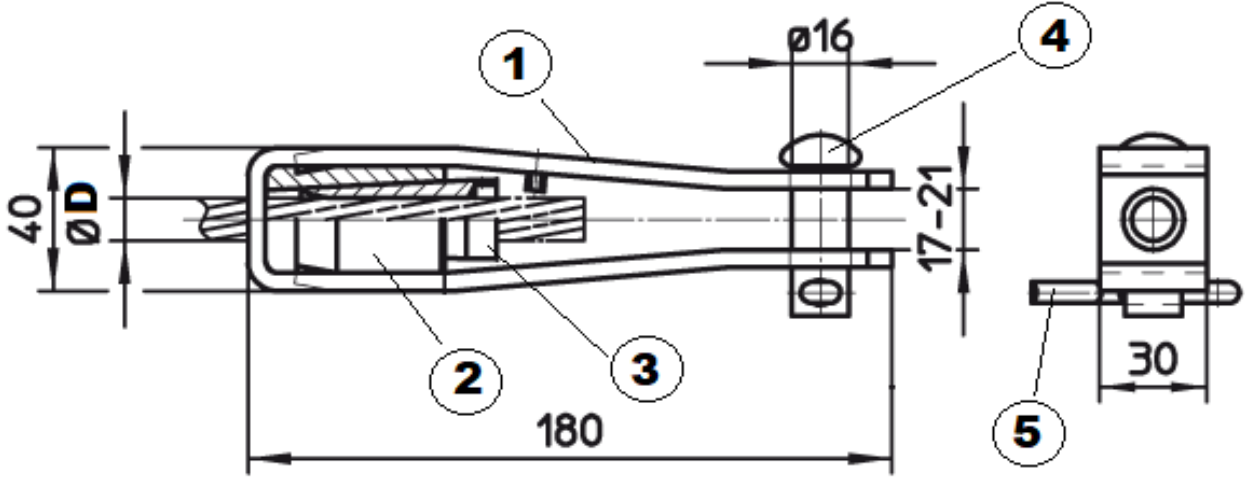


5		Yaylı Rondela / Spring Washer M10	Paslanmaz Çelik / Stainless Steel	8
4		Somun / Nuts M10	Paslanmaz Çelik / Stainless Steel	8
3		U- Civata / U-Bolt	Paslanmaz Çelik / Stainless Steel	4
2		Klemens Papucu / Clamp Shoe	Alüminyum Alaşım T6 / Alloy of Aluminum T6	1
1		Gövde / Body	Alüminyum Alaşım T6 / Alloy of Aluminum T6	1
		Pim / Pin	Çinko Kaplı Çelik / Zinc Coated steel	1
<b>No.</b>	<b>Parça No. / Part No.</b>	<b>Açıklama / Description</b>	<b>Malzeme / Material</b>	<b>Adet / Quantity</b>



TEP - 310

ÇATAL UÇ MANŞONU  
FORK END SLEEVE



ØD	mm Ø	mm²	ØD	mm Ø	mm²
10,80	65				
12,90	95				
			12,40	107	
14,00	120		13,80	120	
16,50	150		15,00	150	

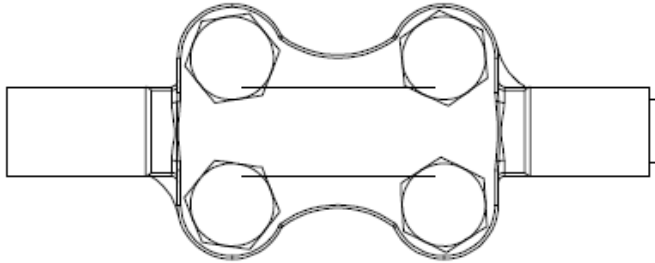
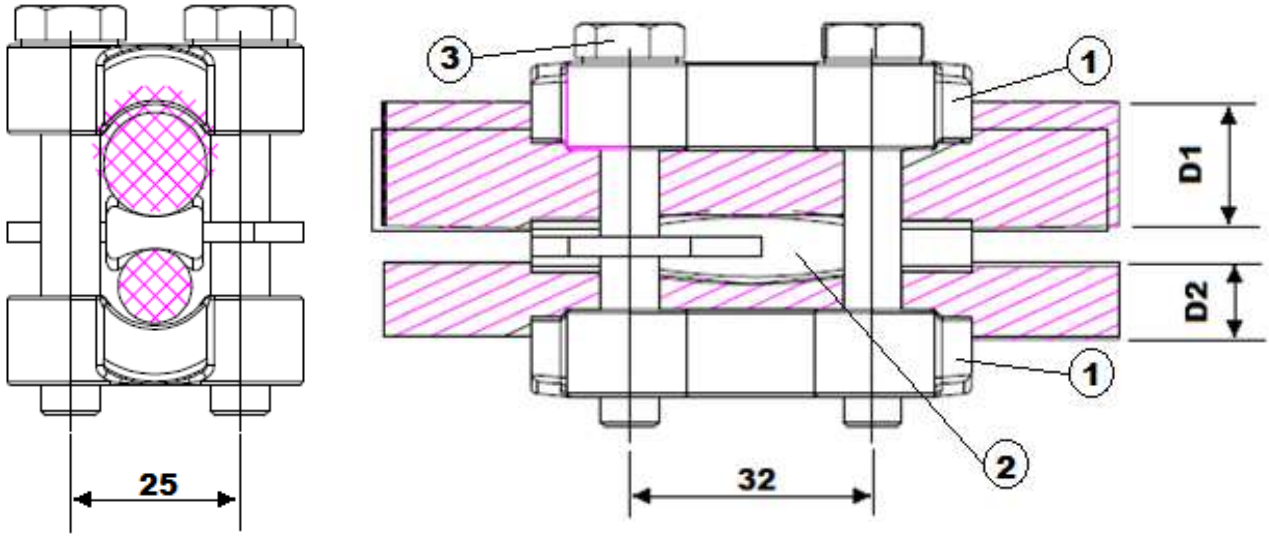
No.	Parça No. / Part No.	Açıklama / Description	Malzeme / Material	Adet / Quantity
5		Gupilya / Split Pin	Paslanmaz Çelik / Stainless Steel	1
4		Pim / Pin	Paslanmaz Çelik / Stainless Steel	1
3		Esnek Kovan / Collet	AlBz - Paslanmaz Çelik / AlBz - Stainless Steel	1
2		Kovan / Case	Paslanmaz Çelik / Stainless Steel	1
1		Gövde / Body	Paslanmaz Çelik / Stainless Steel	1





TEP - 320

Y HALATI BAĞLANTI GRİFİ  
STITCH WIRE CONNECTION CLAMP



D1	D2
25-70 mm	25-35 mm

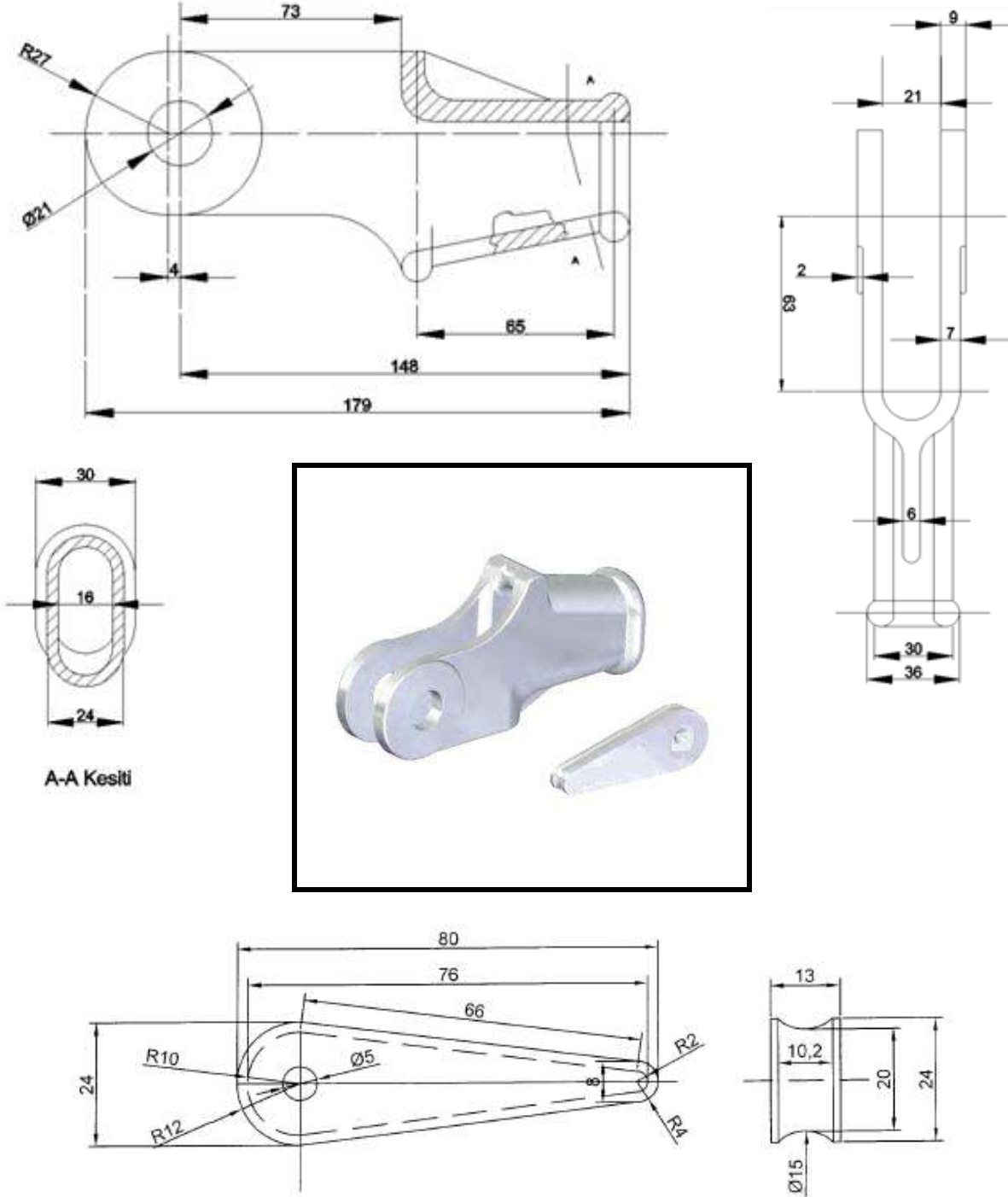


No.	Parça No. / Part No.	Açıklama / Description	Malzeme / Material	Adet / Quantity
3		Civata /Screw M8X50	Paslanmaz Çelik / Stainless Steel	4
2		Klemens Papucu / Clamp Shoe	CuNiSi	1
1		Gövde / Body	CuNiSi	2



TEP - 330

Ø 8-12 HALAT İÇİN UÇ MANŞONU VE KAMASI  
END SLEEVE AND KEY FOR Ø 8-12 ROPE



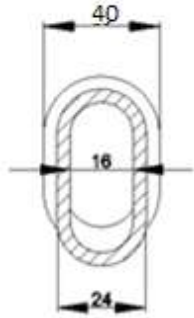
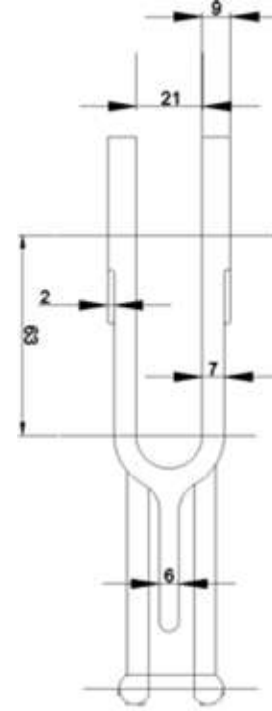
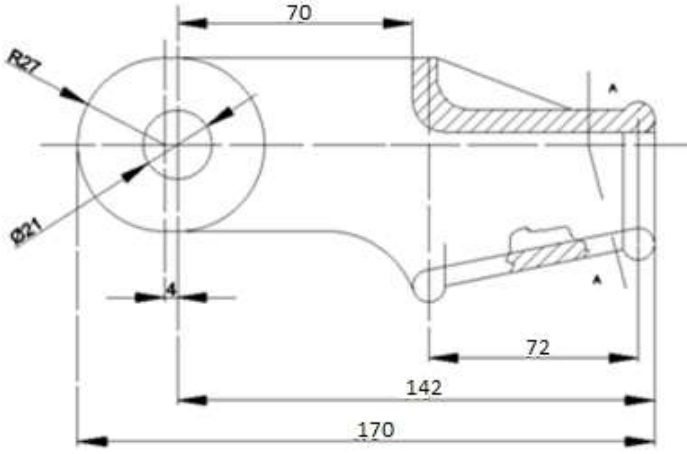
**KAPLAMA: TS 914 SICAK GALVANİZ**

No.	Parça No. / Part No.	Açıklama / Description	Malzeme / Material	Adet / Quantity
		Kama / Wedge	GGG 40.3 / EN GJS 400-18	1
1		Gövde / Body	GGG 40.3 / EN GJS 400-18	1

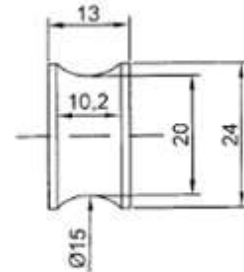
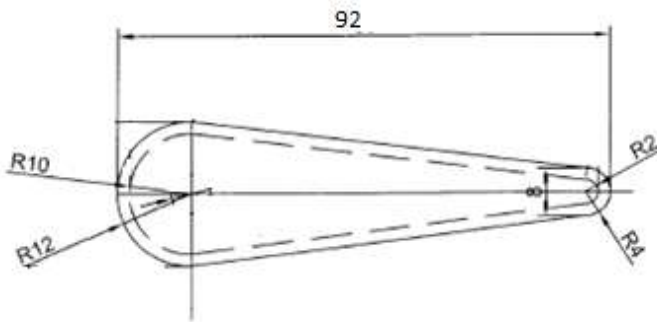


TEP - 331

Ø 8-12 HALAT İÇİN UÇ MANŞONU VE KAMASI  
END SLEEVE AND KEY FOR Ø 8-12 ROPE



A-A Kesiti

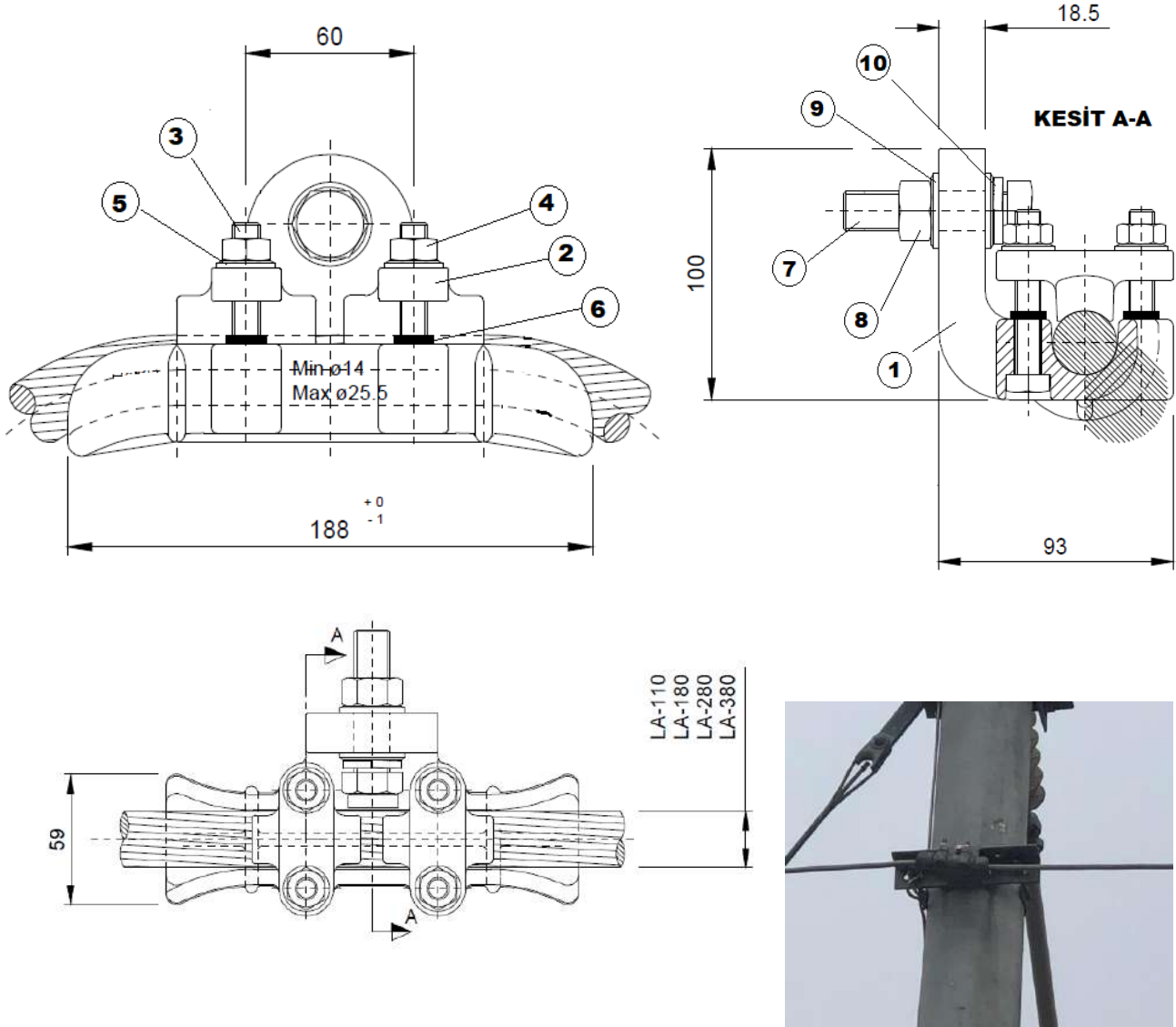


No.	Parça No. / Part No.	Açıklama / Description	Malzeme / Material	Adet / Quantity
		Kama / Wedge	Alüminyum Alaşım T6 / Alloy of Aluminum T6	1
1		Gövde / Body	Alüminyum Alaşım T6 / Alloy of Aluminum T6	1



**TEP - 340**

**FİDER İLETKENİ PENİSİ**  
**FORCEPS FOR FEEDER CONNECTION**

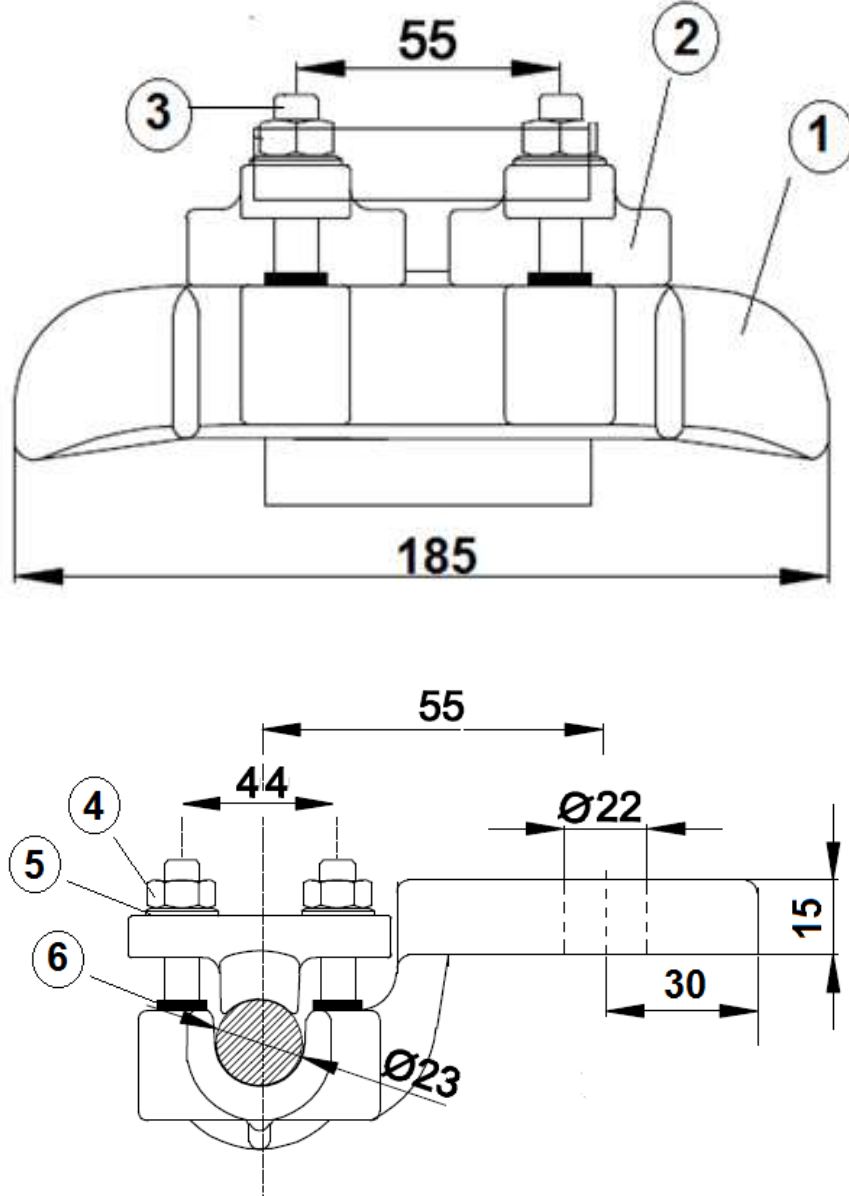


No.	Parça No. / Part No.	Açıklama / Description	Malzeme / Material	Adet / Quantity
10		Yaylı Rondela / Spring Washer M16	Paslanmaz Çelik / Stainless Steel	1
9		Düz Pul / Flat Washer M16	Paslanmaz Çelik / Stainless Steel	2
8		Somun / Nuts M16	Paslanmaz Çelik / Stainless Steel	1
7		Civata /Screw M16X65	Paslanmaz Çelik / Stainless Steel	1
6		Oring Ø 9 x 2	NBR	4
5		Yaylı Rondela / Spring Washer M10	Paslanmaz Çelik / Stainless Steel	4
4		Somun / Nuts M10	Paslanmaz Çelik / Stainless Steel	4
3		Civata /Screw M10X60	Paslanmaz Çelik / Stainless Steel	4
2		Klemens Papucu / Clamp Shoe	Alüminyum Alaşım Döküm / Cast Aluminium Alloy	2
1		Gövde / Body	Alüminyum Alaşım Döküm / Cast Aluminium Alloy	1
No.	Parça No. / Part No.	Açıklama / Description	Malzeme / Material	Adet / Quantity



TEP - 345

İZOLATÖR ÜSTÜ FİDER İLETKENİ PENSİ (İZOLATÖR BAĞLANTI ÇAPI 60 mm)  
FORCEPS FOR INSULATOR TOP FEEDER CONNECTION

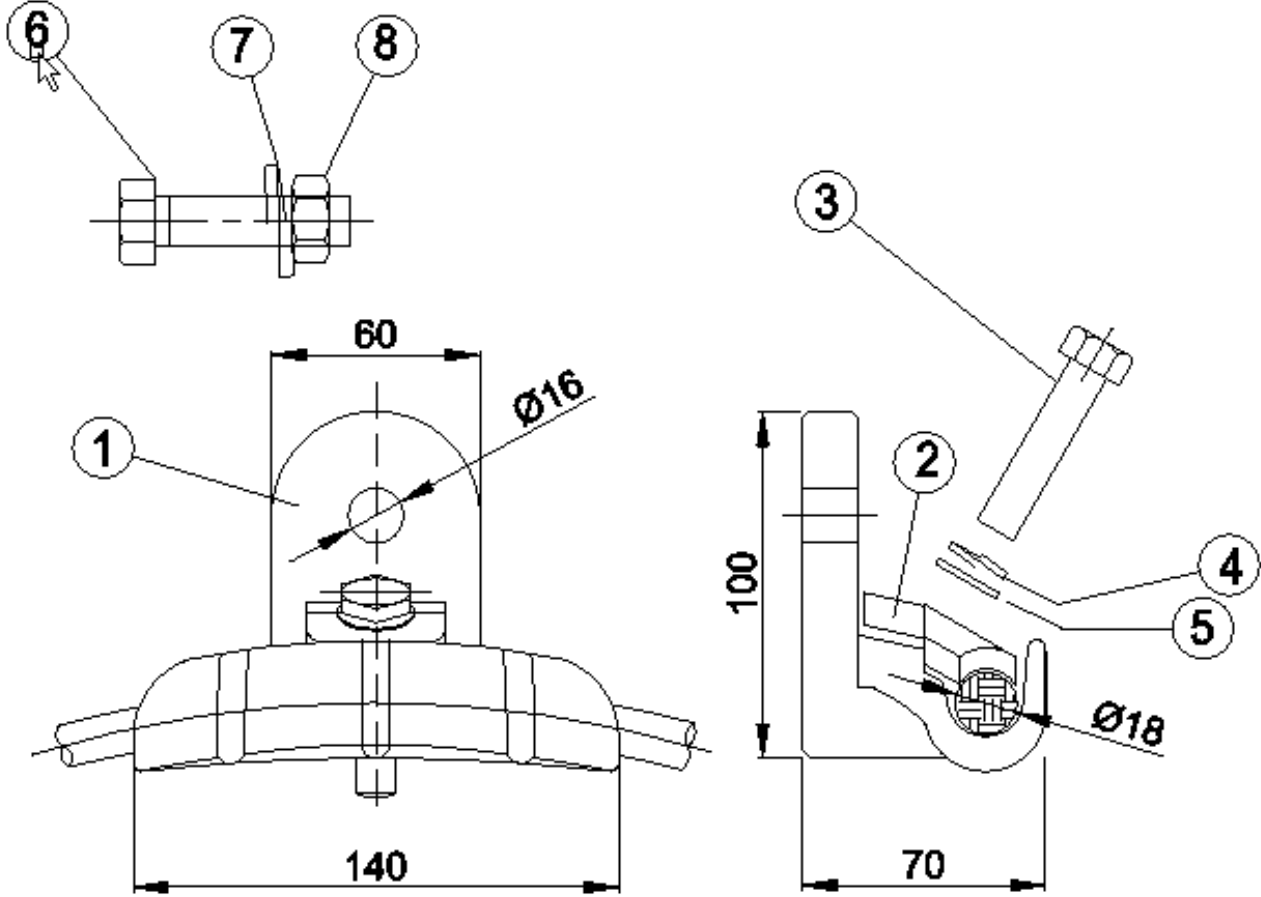


No.	Parça No. / Part No.	Açıklama / Description	Malzeme / Material	Adet / Quantity
6		Oring Ø 9 x 2	NBR	4
5		Yaylı Rondela / Spring Washer M10	Paslanmaz Çelik / Stainless Steel	4
4		Somun / Nuts M10	Paslanmaz Çelik / Stainless Steel	4
3		Civata /Screw M10X60	Paslanmaz Çelik / Stainless Steel	4
2		Klemens Papucu / Clamp Shoe	Alüminyum Alaşım Döküm / Cast Aluminium Alloy	2
1		Gövde / Body	Alüminyum Alaşım Döküm / Cast Aluminium Alloy	1



TEP - 350

GERİ DÖNÜŞ İLETKENİ PENSİ ( LA-180 )  
FORCEPS FOR RETURN CONDUCTOR ( LA-180)



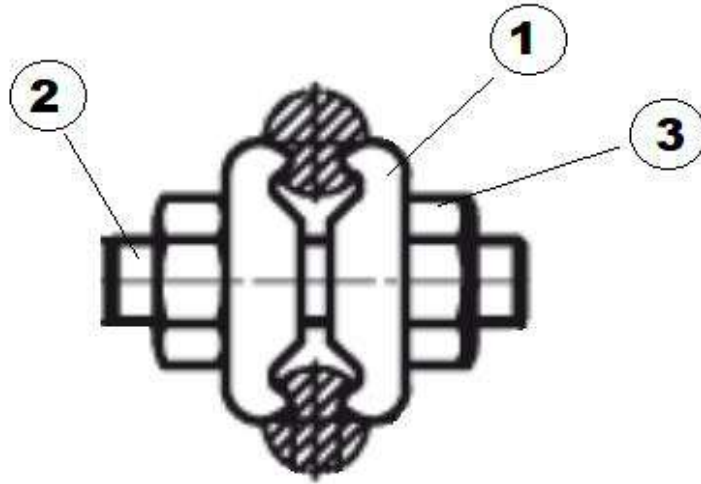
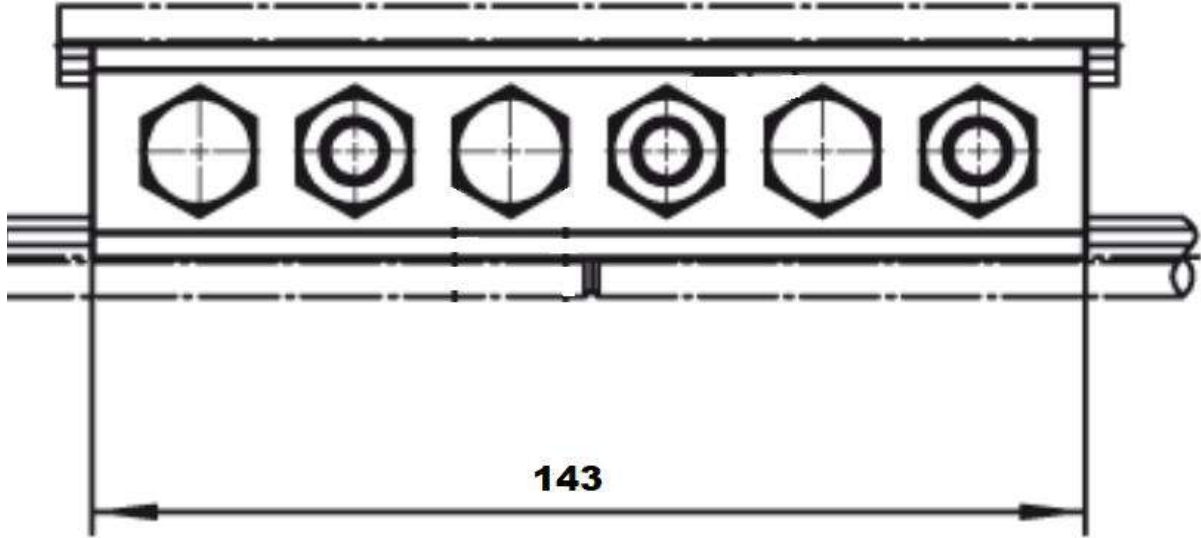
8		Somun / Nuts M14	Paslanmaz Çelik / Stainless Steel	1
7		Yaylı Rondela / Spring Washer M14	Paslanmaz Çelik / Stainless Steel	1
6		Civata /Screw M14X55	Paslanmaz Çelik / Stainless Steel	1
5		Pul / Washer M12	Paslanmaz Çelik / Stainless Steel	1
4		Yaylı Rondela / Spring Washer M12	Paslanmaz Çelik / Stainless Steel	1
3		Civata /Screw M12X55	Paslanmaz Çelik / Stainless Steel	1
2		Klemens Papucu / Clamp Shoe	Alüminyum Alaşım Döküm / Cast Aluminium Alloy	1
1		Gövde / Body	Alüminyum Alaşım Döküm / Cast Aluminium Alloy	1
No.	Parça No. / Part No.	Açıklama / Description	Malzeme / Material	Adet / Quantity

ÖLÇÜ VE MALZEME İLE İLGİLİ DEĞİŞİM HAKKI TEPSAN 'A AİTTİR



TEP - 405

SEYİR TELİ EK GRİFİ  
CONTACT WIRE SPLICE

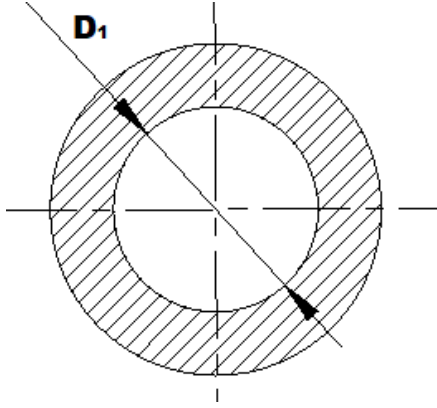
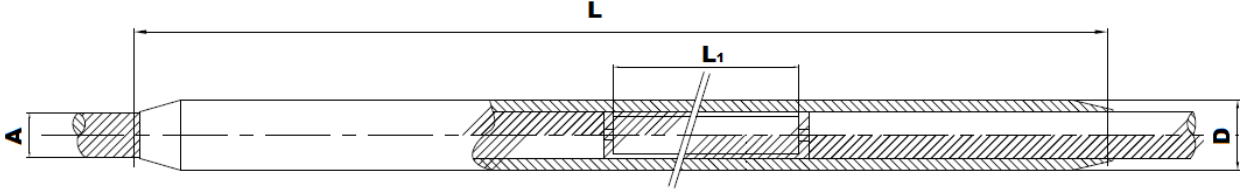


3		Somun / Nuts M10	Paslanmaz Çelik / Stainless Steel	6
2		Civata /Screw M10X40	Paslanmaz Çelik / Stainless Steel	6
1		Gövde / Body	CuAl9Fe3	2
No.	Parça No. / Part No.	Açıklama / Description	Malzeme / Material	Adet / Quantity



TEP - 410

**PRES SIKMALI EK MANŞON (Al/St)**  
**COMPRESSION JOINTS**



İLETKEN KESİTİ (A) mm <sup>2</sup>	L mm	L <sub>1</sub> mm	D mm	D <sub>1</sub> mm
LA-30	215	85	20	8,5
LA-56	280	95	20	10
LA-110	410	130	25	15,5
LA-145	410	140	25	16,5
LA-180	500	140	30	20
LA-280	600	140	40	23

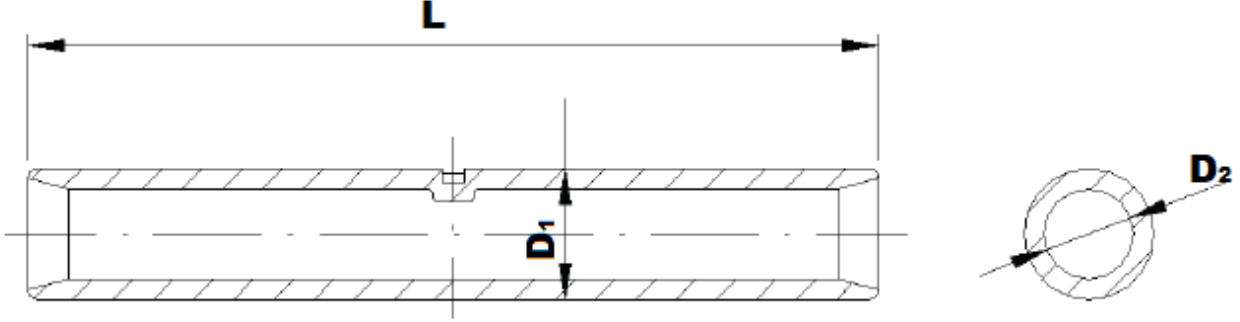
2		İç Boru / Inner Pipe	Çelik ( St-37 ) / Steel	1
1		Gövde / Body	Alüminyum Alaşım / Aluminium Alloy	1
No.	Parça No. / Part No.	Açıklama / Description	Malzeme / Material	Adet / Quantity





TEP - 420

PORTÖR TELİ EK MANŞONU (PRES SIKIŞTIRMALI)  
COMPRESSION JOINTS FOR MESSENGER WIRE



TİP

ÖLÇÜLER

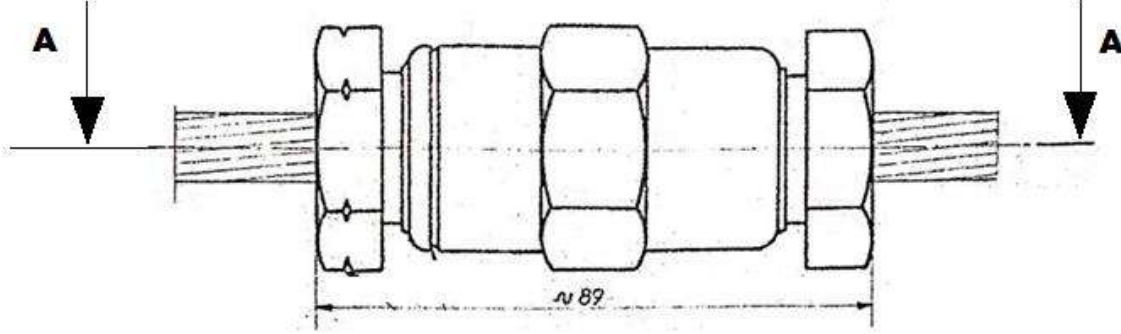
TİP (mm <sup>2</sup> )	D1 (mm)	D2 (mm)	L (mm)
50	14,5	10	95
70	16,5	11,5	111
120	22	15	160
150	25	17	182
95	21	14	145
25	10,2	7	80

No.	Parça No. / Part No.	Açıklama / Description	Malzeme / Material	Adet / Quantity
1		Gövde / Body	Cu-ETP	1

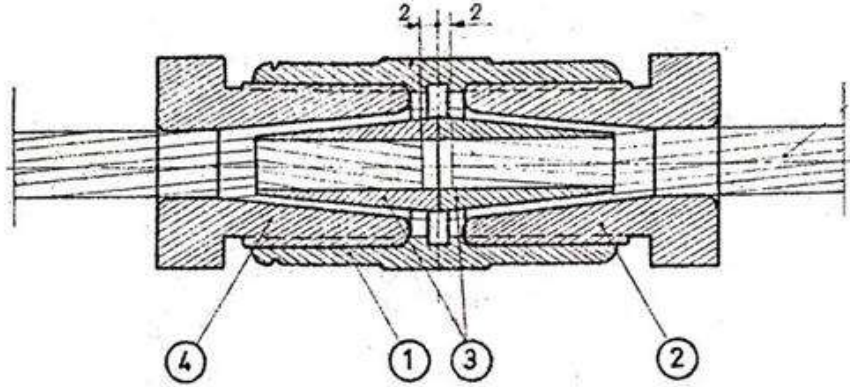


TEP - 430

PORTÖR TELİ EK MANŞONU (65mm<sup>2</sup>)  
MESSENGER WIRE SPLICE (65mm<sup>2</sup>)



**KESİT A-A**



Not : Kullanılan kablo çapına göre sıkıştırma karotunun ölçüsü değişir.

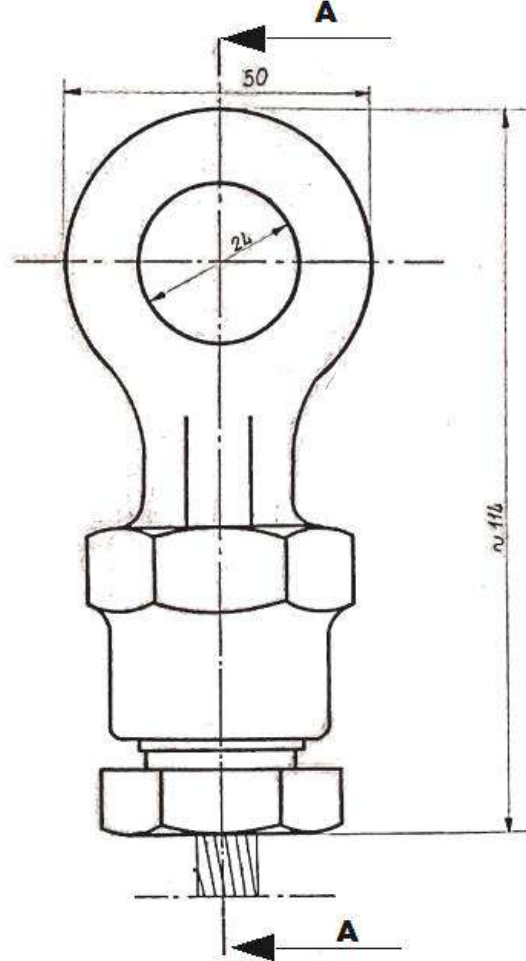
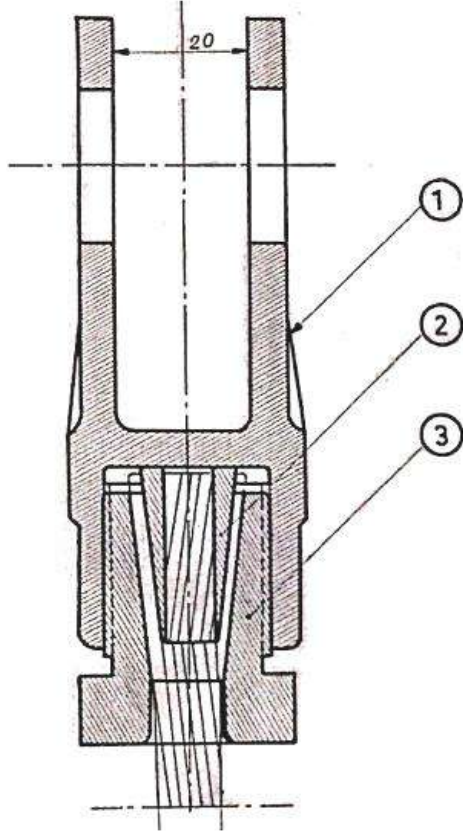
No.	Parça No. / Part No.	Açıklama / Description	Malzeme / Material	Adet / Quantity
4	TEP- 795	Sol Vidalı Kupro / Leftt-Screw Cap	Alüminyum Bronz Alaşımı/ Aluminium Bronze Alloy	1
3	TEP- 790	Sıkıştırma Paçası / Clamping piece	Alüminyum Bronz Alaşımı/ Aluminium Bronze Alloy	2
2	TEP-785	Sağ Vidalı Kupro / Right-Screw Cap	Alüminyum Bronz Alaşımı/ Aluminium Bronze Alloy	1
1	TEP- 820	Gövde / Body	Alüminyum Bronz Alaşımı/ Aluminium Bronze Alloy	1



TEP - 440

UÇ MANŞONU (65 mm<sup>2</sup>)  
END SLEEVE (65 mm<sup>2</sup>)

KESİT A-A



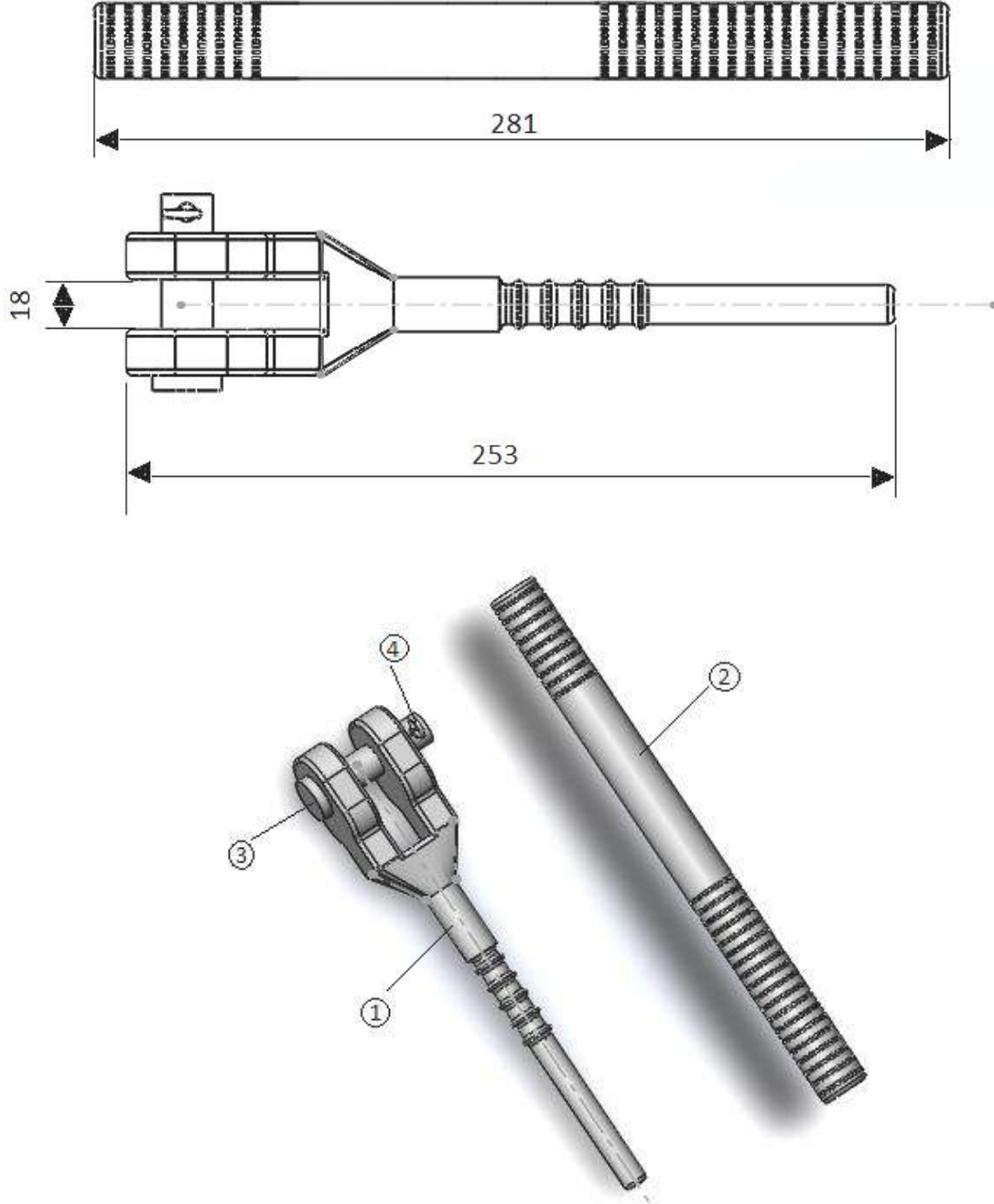
Not : Kullanılan kablo çapına göre sıkıştırma karotunun ölçüsü değişir.

No.	Parça No. / Part No.	Açıklama / Description	Malzeme / Material	Adet / Quantity
3	TEP 785	Sağ Vidalı Kupro / Right-Screw Cap	Alüminyum Bronz Alaşımı/ Aluminium Bronze Alloy	1
2	TEP 790	Sıkıştırma Paçası / Clamping piece	Alüminyum Bronz Alaşımı/ Aluminium Bronze Alloy	1
1	TEP 1265	Gövde / Body	Alüminyum Bronz Alaşımı/ Aluminium Bronze Alloy	1



TEP - 450

PORTÖR TELİ UÇ FIX MANŞONU  
MESSENGER WIRE END SLEEVE FIX

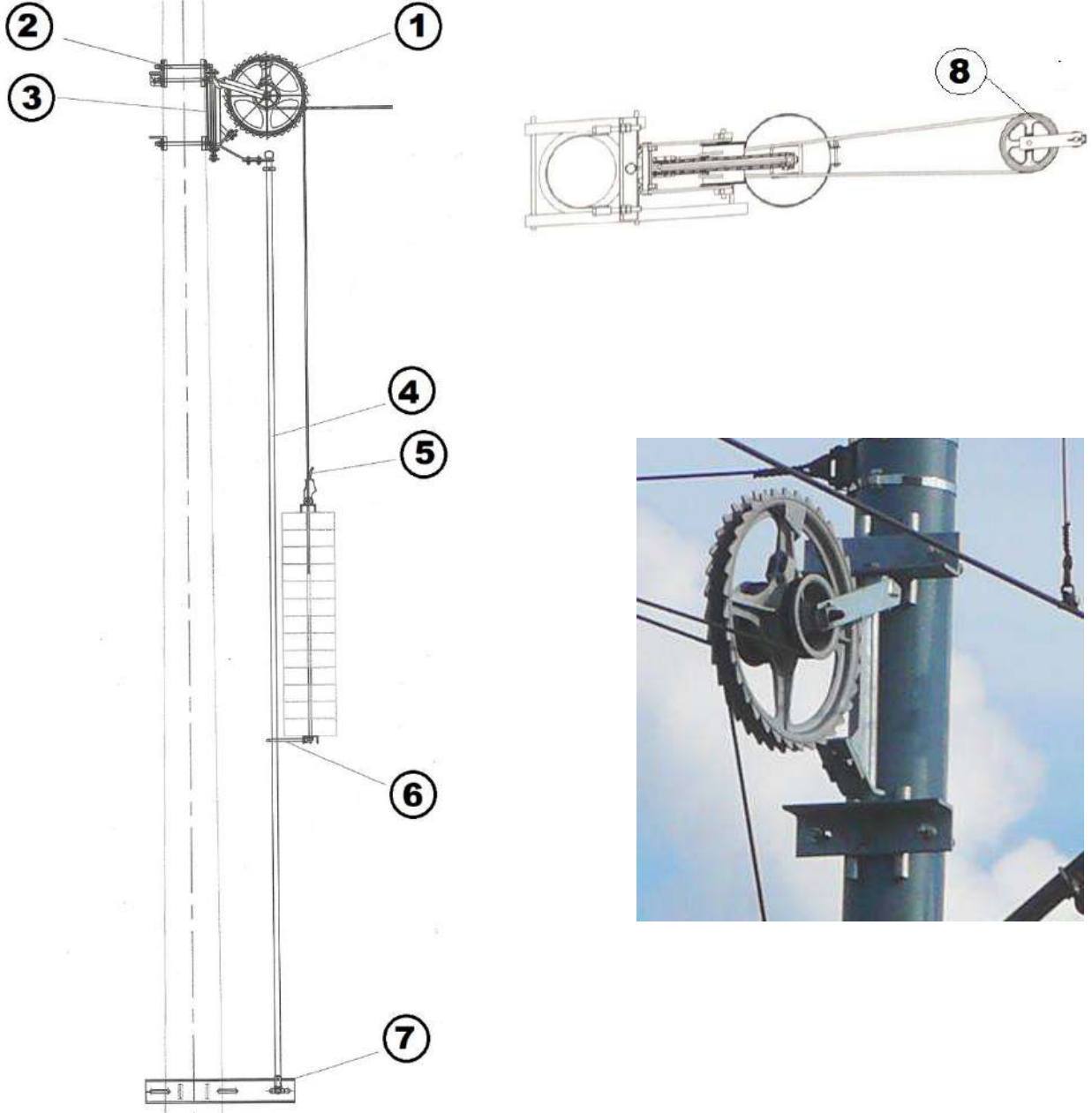


4		Gupilya / Joiner Pin	Paslanmaz Çelik / Stainless Steel	1
3		Pim / Pin	Çinko Kaplı Çelik / Zinc Coated steel	1
2		Boru / Tube	Alüminyum Alaşımı/ Aluminium Alloy	1
1		Gövde / Body	Dövme Çelik / Forged Steel	1
<b>No.</b>	<b>Parça No. / Part No.</b>	<b>Açıklama / Description</b>	<b>Malzeme / Matreial</b>	<b>Adet / Quantity</b>



TEP - 505

TEKLİ GERGİ TERTİBATI SETİ  
SINGLE TENSIONING DEVICE

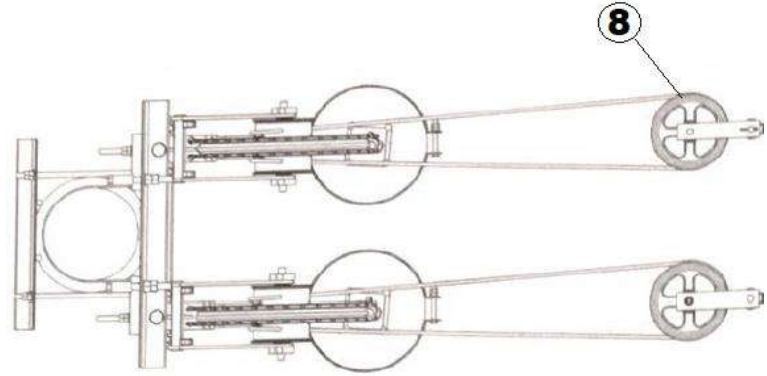
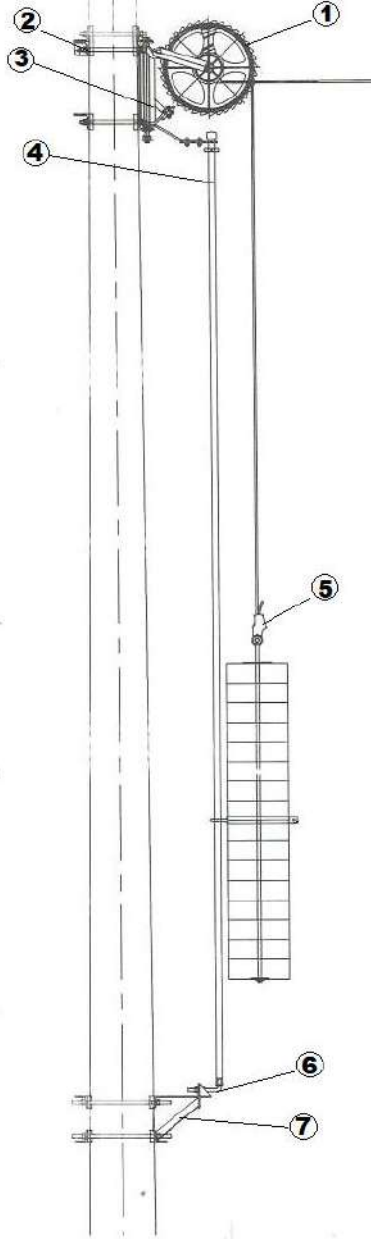


8		Denge Kasnağı / Balance Pulley	Alüminyum Alaşım Döküm / Cast Aluminium Alloy	1
7		Ağırlık Kılavuz Desteği / Weight Guide Support	S275JR Sıcak Daldırma Galv./ S275JR Hot Dip Galv.	1
6		Ağırlık Kılavuz Mesnedi için Saplama Screw Bolt for Weight Guide Support	S275JR Sıcak Daldırma Galv./ S275JR Hot Dip Galv.	1
5		Ø 8-12 mm Tel için Uç Manşonu Clamp for 8-12 mm Diameter Steel Cable	GGG 40.3 Sıcak Daldırma Galv. / EN GJS 400-18 Hot Dip Galv.	1
4		Ağırlık için Kılavuz Borusu Guide Tube for Weights	S275JR Sıcak Daldırma Galv./ S275JR Hot Dip Galv.	1
3		Gergi Cihazı Makara Durdurucu Pulley Stoper	S275JR Sıcak Daldırma Galv./ S275JR Hot Dip Galv.	1
2		Gerdirmeye Makara Bağlantı Şasesi Tensioning Pulley Mounting Frame	S275JR Sıcak Daldırma Galv./ S275JR Hot Dip Galv.	1
1		1/3 Gerdirmeye Makarası 1/3 Tensioning Pulley	Alüminyum Alaşım Döküm / Cast Aluminium Alloy	1
<b>No.</b>	<b>Parça No. / Part No.</b>	<b>Açıklama / Description</b>	<b>Malzeme / Material</b>	<b>Adet / Quantity</b>



TEP - 520

ÇİFTLİ GERGİ TERTİBATI SETİ (TİP I)  
DOUBLE TENSIONING DEVICE

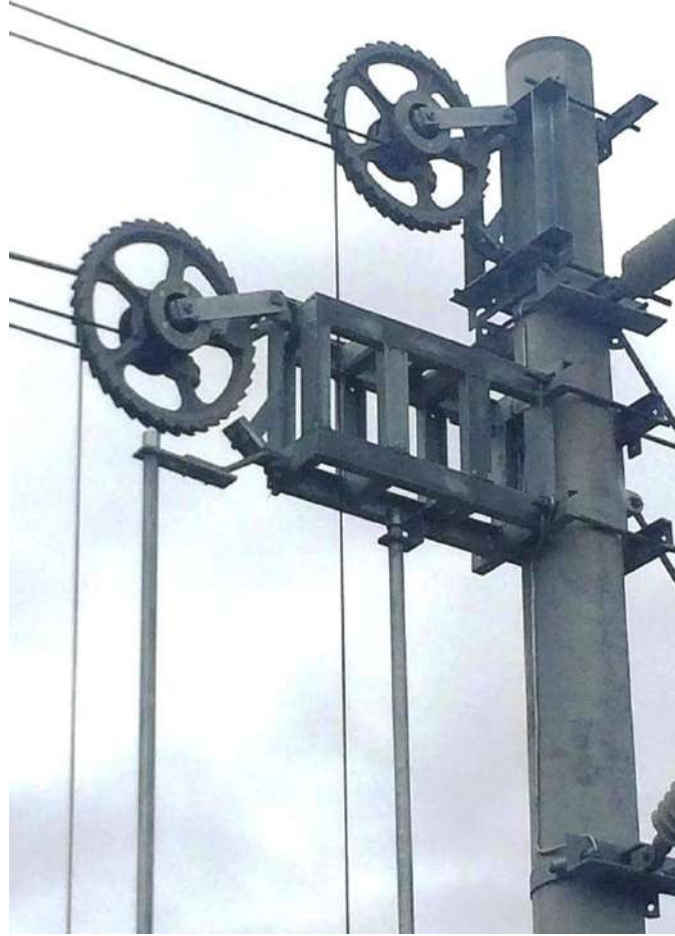
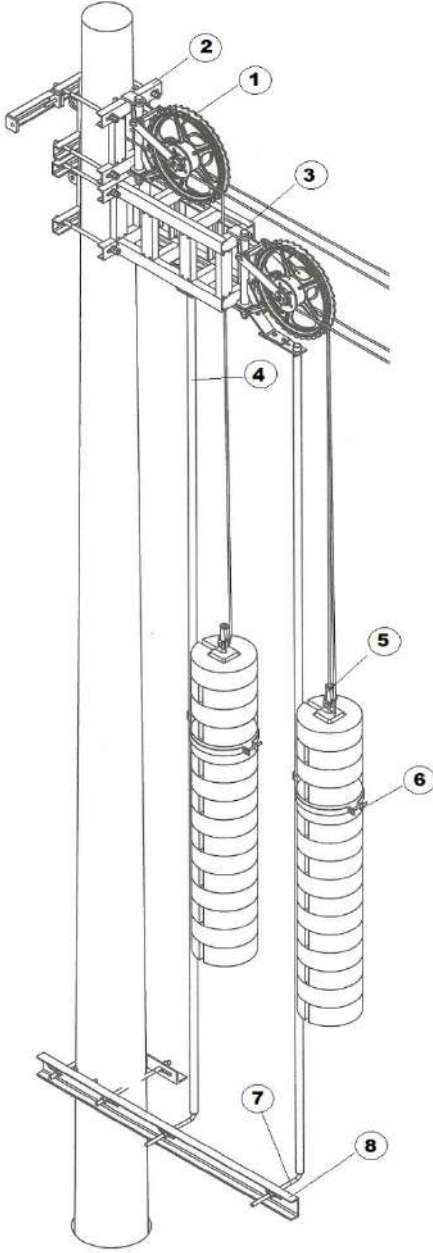


No.	Parça No. / Part No.	Açıklama / Description	Malzeme / Material	Adet / Quantity
8		Denge Kasnağı / Balance Pulley	Alüminyum Alaşım Döküm / Cast Aluminium Alloy	2
7		Ağırlık Kılavuz Desteği / Weight Guide Support	S275JR Sıcak Daldırma Galv./ S275JR Hot Dip Galv.	1
6		Ağırlık Kılavuz Mesnedi için Saplama Screw Bolt for Weight Guide Support	S275JR Sıcak Daldırma Galv./ S275JR Hot Dip Galv.	2
5		Ø 8-12 mm Tel için Uç Manşonu Clamp for 8-12 mm Diameter Steel Cable	GGG 40.3 Sıcak Daldırma Galv. / EN GJS 400-18 Hot Dip Galv.	2
4		Ağırlık için Kılavuz Borusu Guide Tube for Weights	S275JR Sıcak Daldırma Galv./ S275JR Hot Dip Galv.	2
3		Gergi Cihazı Makara Durdurucu Pulley Stoper	S275JR Sıcak Daldırma Galv./ S275JR Hot Dip Galv.	2
2		Çiftli Gerdirme Makara Bağlantı Şasesi Double Tensioning Pulley Mounting Frame	S275JR Sıcak Daldırma Galv./ S275JR Hot Dip Galv.	1
1		1/3 Gerdirme Makarası 1/3 Tensioning Pulley	Alüminyum Alaşım Döküm / Cast Aluminium Alloy	2



TEP - 525

**ÇİFTLİ GERGİ TERTİBATI SETİ (TİP II)**  
**DOUBLE TENSIONING DEVICE**



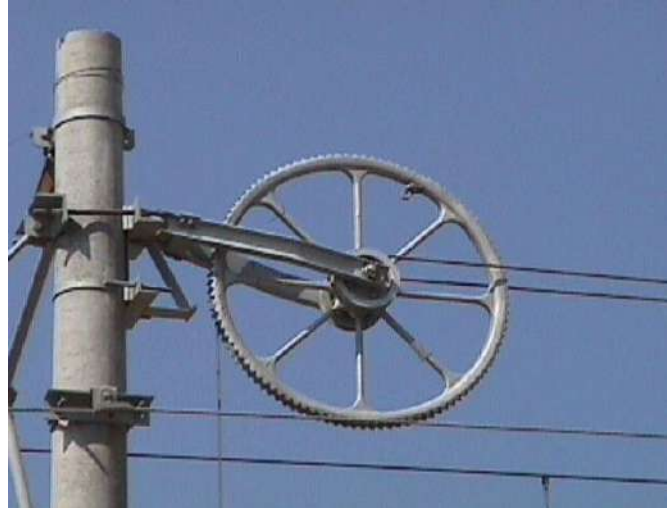
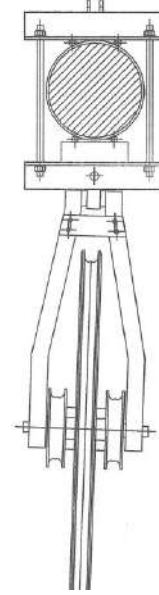
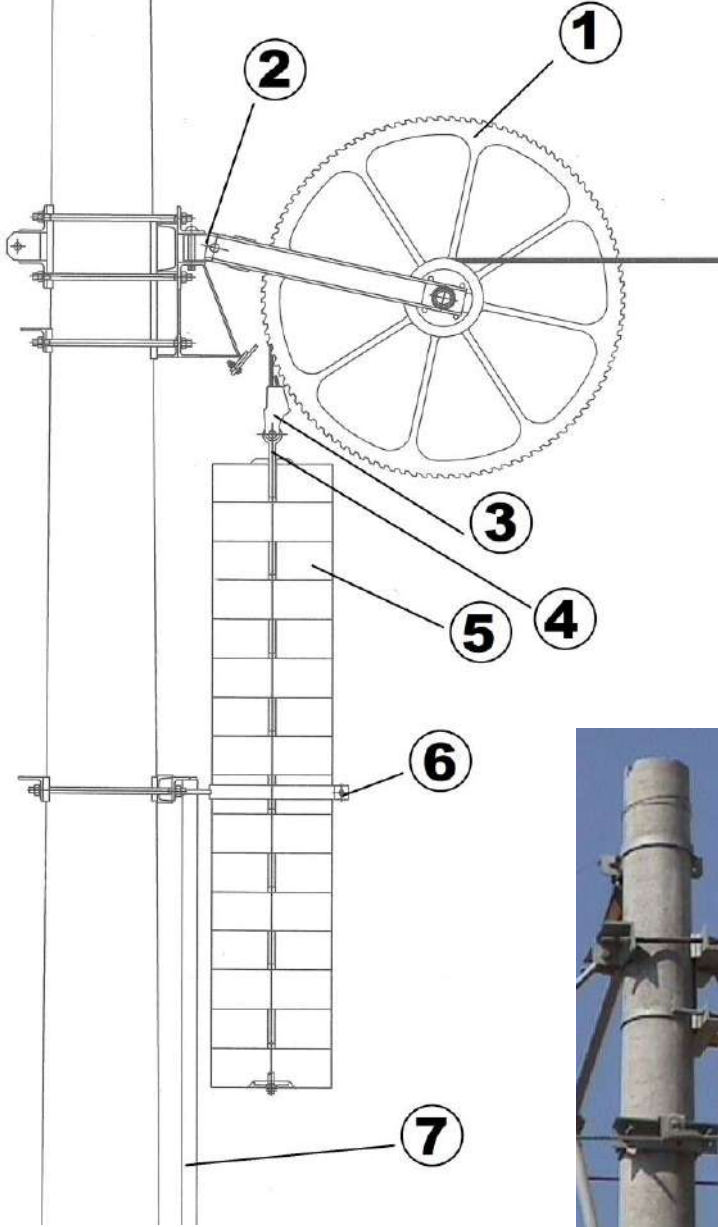
8		Ağırlık Kılavuz Desteği / Weight Guide Support	S275JR Sıcak Daldırma Galv./ S275JR Hot Dip Galv.	1
7		Ağırlık Kılavuz Mesnedi için Saplama Screw Bolt for Weight Guide Support	S275JR Sıcak Daldırma Galv./ S275JR Hot Dip Galv.	2
6		Ağırlık Kılavuz Kelepçesi Counter weight ring	S275JR Sıcak Daldırma Galv./ S275JR Hot Dip Galv.	2
5		Ø 8-12 mm Tel için Uç Manşonu Clamp for 8-12 mm Diameter Steel Cable	GGG 40.3 Sıcak Daldırma Galv. / EN GJS 400-18 Hot Dip Galv.	2
4		Ağırlık için Kılavuz Borusu Guide Tube for Weights	S275JR Sıcak Daldırma Galv./ S275JR Hot Dip Galv.	2
3		Alt Gerdirme Makara Bağlantı Şasesi Lower Tensioning Pulley Mounting Frame	S275JR Sıcak Daldırma Galv./ S275JR Hot Dip Galv.	1
2		Üst Gerdirme Makara Bağlantı Şasesi Upper Tensioning Pulley Mounting Frame	S275JR Sıcak Daldırma Galv./ S275JR Hot Dip Galv.	1
1		1/3 Gerdirme Makarası 1/3 Tensioning Pulley	Alüminyum Alaşım Döküm / Cast Aluminium Alloy	2

No.	Parça No. / Part No.	Açıklama / Description	Malzeme / Material	Adet / Quantity
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TEP - 550

TEKLİ GERGİ TERTİBATI SETİ (1/5)  
SINGLE TENSIONING DEVICE



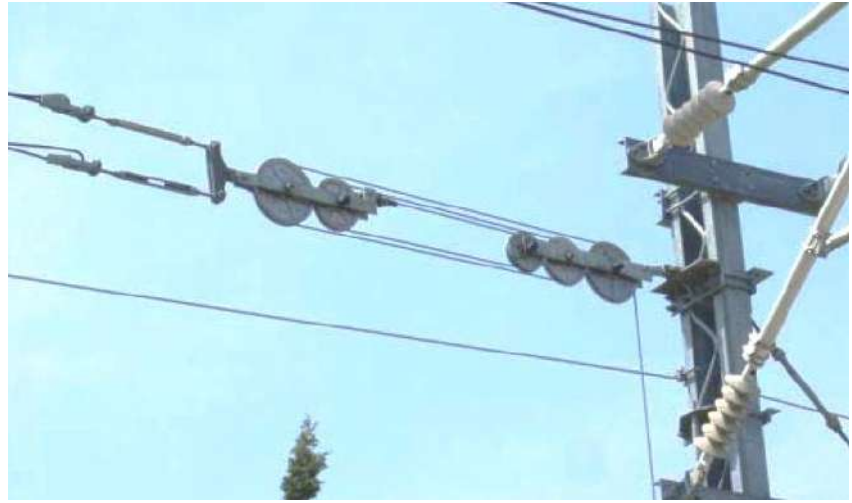
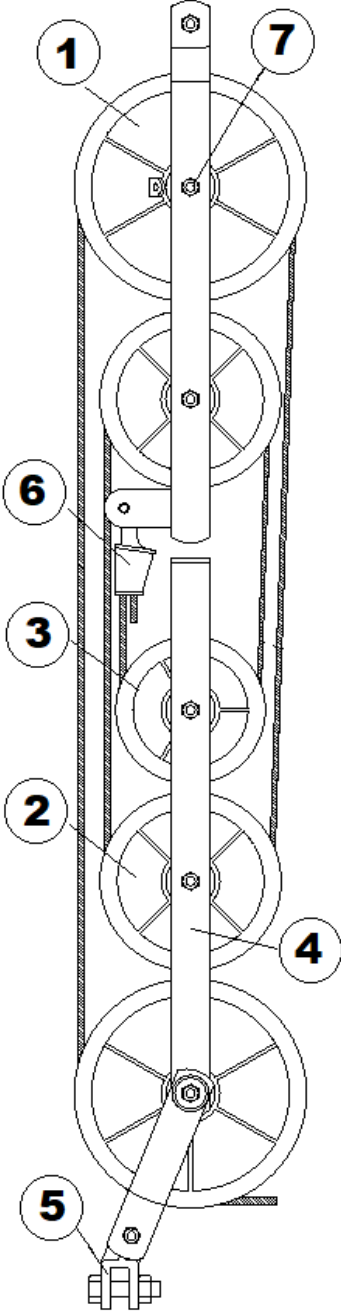
No.	Parça No. / Part No.	Açıklama / Description	Malzeme / Material	Adet / Quantity
7		Ağırlık için Kılavuz Borusu Guide Tube for Weights	S275JR Sıcak Daldırma Galv./ S275JR Hot Dip Galv.	1
6		Ağırlık Kılavuz Kelepçesi Counter weight ring	S275JR Sıcak Daldırma Galv./ S275JR Hot Dip Galv.	1
5		30 kg Beton Ağırlığı 30 kg Concrete Counter weight	Beton / Concrete	16
4		Ağırlık Tiji Counterweight Support	S275JR Sıcak Daldırma Galv./ S275JR Hot Dip Galv.	1
3		Ø 8-12 mm Tel için Uç Manşonu Clamp for 8-12 mm Diameter Steel Cable	GGG 40.3 Sıcak Daldırma Galv. / EN GJS 400-18 Hot Dip Galv.	1
2		Gergi Cihazı Makara Durdurucu Pulley Stoper	S275JR Sıcak Daldırma Galv./ S275JR Hot Dip Galv.	1
1		1/5 Gerdirme Makarası 1/5 Tensioning Pulley	Alüminyum Alaşım Döküm / Cast Aluminium Alloy	1





TEP - 555

**PALANGALI GERDİRME CİHAZI (1/5)**  
**CONVENTIONAL COUNTERWEIGHT TENSIONING DEVICE**



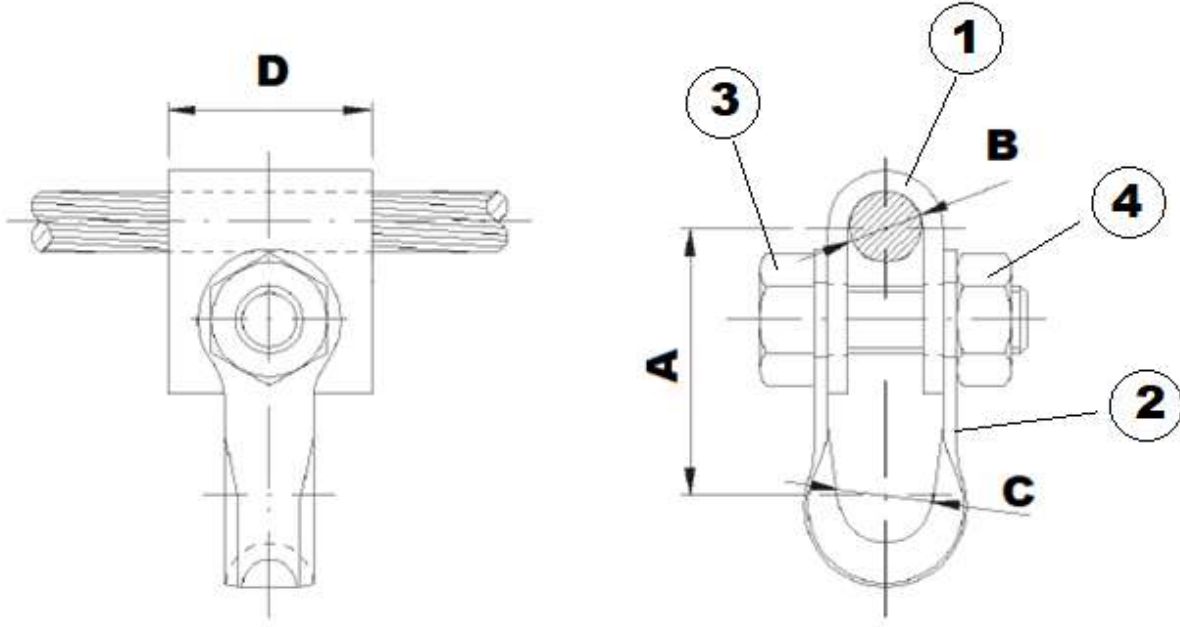
7		Makara Ekseni Pulley Axis	Paslanmaz Çelik Stainless Steel	5
6		Ø 6-9 mm Tel için Uç Manşonu Clamp for 6-9 mm Diameter Steel Cable	GGG 40.3 Sıcak Daldırma Galv. / EN GJS 400-18 Hot Dip Galv.	1
5		Bağlantı Başlığı Connection Head	GGG 40.3 Sıcak Daldırma Galv. / EN GJS 400-18 Hot Dip Galv.	1
4		Makara Şasesi Pulley Frame	S275JR Sıcak Daldırma Galv. / S275JR Hot Dip Galv.	4
3		Küçük Makara Pulley ( Small )	Alüminyum Alaşım Döküm / Cast Aluminium Alloy	1
2		Orta Makara Pulley ( Medium )	Alüminyum Alaşım Döküm / Cast Aluminium Alloy	1
1		Büyük Makara Pulley ( Large )	Alüminyum Alaşım Döküm / Cast Aluminium Alloy	1

No.	Parça No. / Part No.	Açıklama / Description	Malzeme / Material	Adet / Quantity
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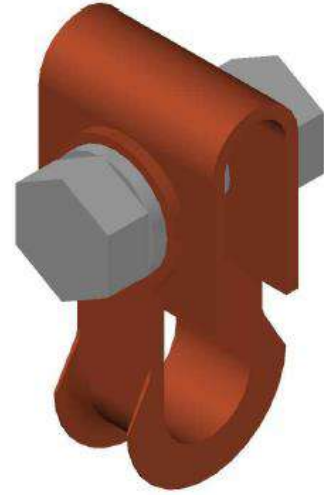


TEP - 1020

**PANDÜL PORTÖR TELİ GRİFİ**  
**MESSENGER WIRE DROPPER CLAMP**



İLETKEN TİPİ (mm <sup>2</sup> )	ÖLÇÜLER			
	A (mm)	B (mm)	C (mm)	D (mm)
65	39,5	11	14	30
95	39,5	13	17	30
120	35	14,5	22	40

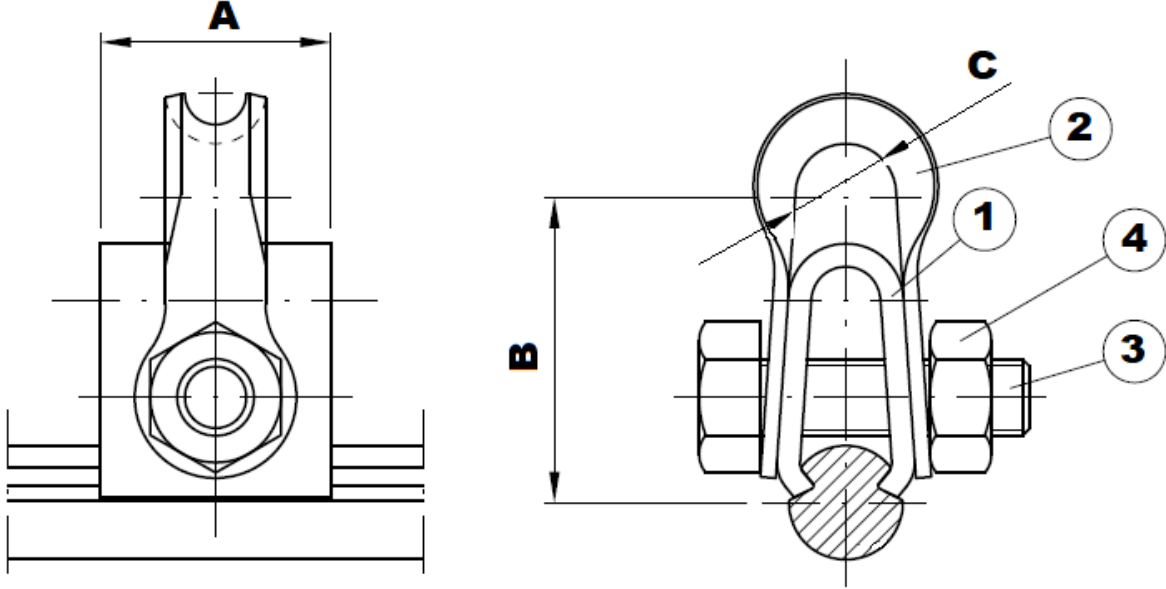


4		Somun / Nuts M10	Paslanmaz Çelik / Stainless Steel	1
3		Civata /Screw M10X35	Paslanmaz Çelik / Stainless Steel	1
2		Halka / Loop	Cu-ETP	1
1		Gövde / Body	Cu-ETP	1
No.	Parça No. / Part No.	Açıklama / Description	Malzeme / Material	Adet / Quantity

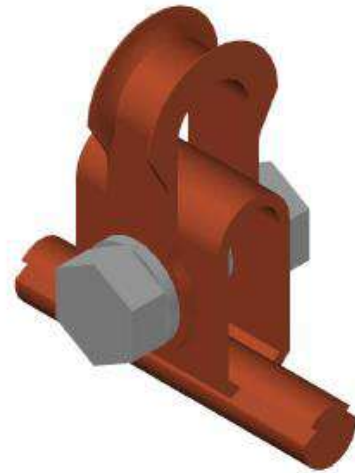


TEP - 1050

PANDÜL SEYİR TELİ GRİFİ  
CONTACT WIRE DROPPER



SEYİR TELİ TİPİ (mm <sup>2</sup> )	ÖLÇÜLER		
	A (mm)	B (mm)	C (mm)
80-150	30	39,7	14

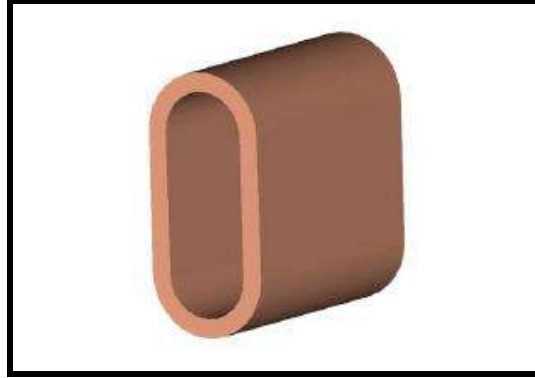
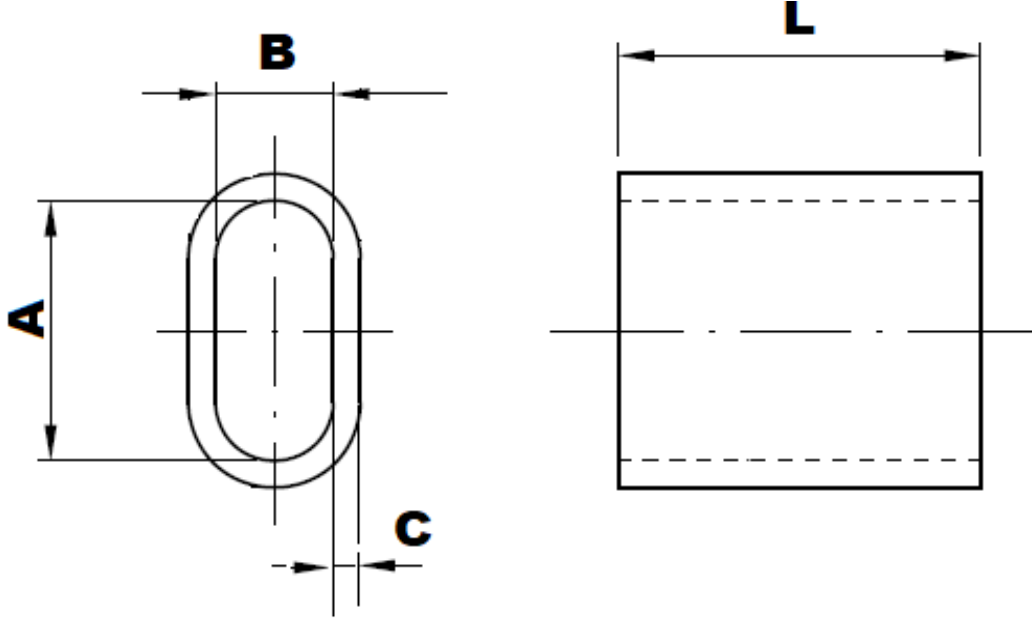


4		Somun / Nuts M10	Paslanmaz Çelik / Stainless Steel	1
3		Civata /Screw M10X35	Paslanmaz Çelik / Stainless Steel	1
2		Halka / Loop	Cu-ETP	1
1		Gövde / Body	CuNiSi	1
<b>No.</b>	<b>Parça No. / Part No.</b>	<b>Açıklama / Description</b>	<b>Malzeme / Material</b>	<b>Adet / Quantity</b>



TEP - 1070

KABLO SIKIŞTIRMA PARÇASI  
SLEEVE FOR CABLE



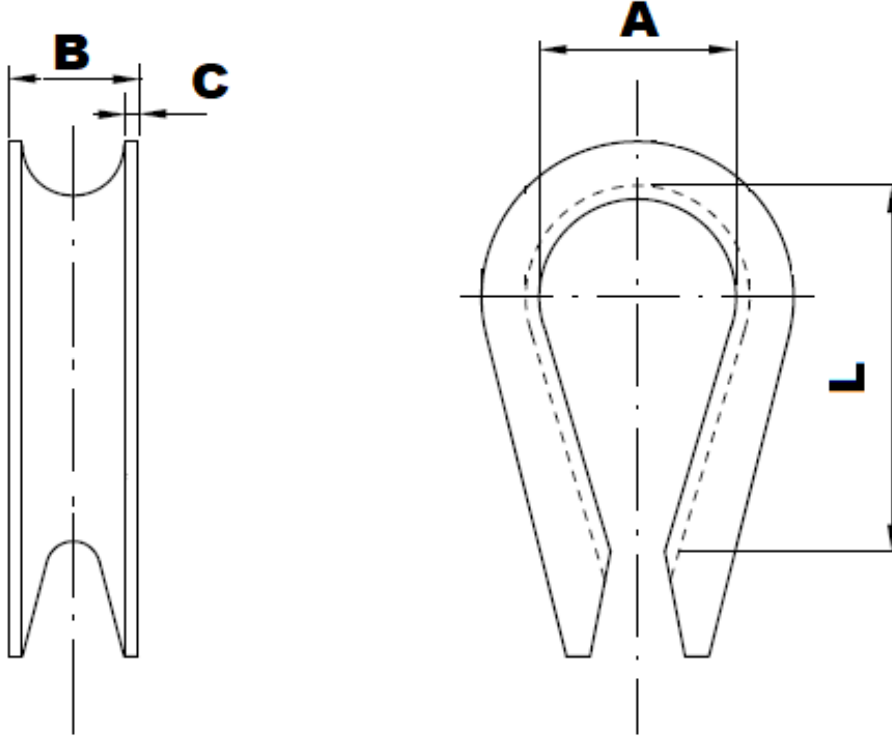
KABLO KESİTİ (mm <sup>2</sup> )	KABLO DIŞ ÇAP (mm)	A (mm)	B (mm)	C (mm)	L (mm)
10	4	10	5	0,75	20
12	5	11,5	5,5	1,5	20
16	6	14,5	6,5	1,5	20
25	7	15	8,5	1,5	20
35	9	20	9,6	1,5	20

1		Gövde / Body	Cu-ETP	1
No.	Parça No. / Part No.	Açıklama / Description	Malzeme / Material	Adet / Quantity



TEP - 1080

PANDÜL İÇİN YÜKSÜK ( RADANSA)  
THIMBLE FOR DROPPER



KABLO KESİTİ mm <sup>2</sup>	L mm	A mm	B mm	C mm
16 \ 25	27	14,5	10	1
10 \ 12	23	13	7	1
16	39,75	21,5	11,5	1,5



No.	Parça No. / Part No.	Açıklama / Description	Malzeme / Material	Adet / Quantity
1		Gövde / Body	Cu-ETP	1