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MOSDORFER RAILWAY CATENARY SYSTEMS

SOLUTIONS
FOR RAILWAY CATENARY SYSTEMS

KNILL GRUPPE

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Contents

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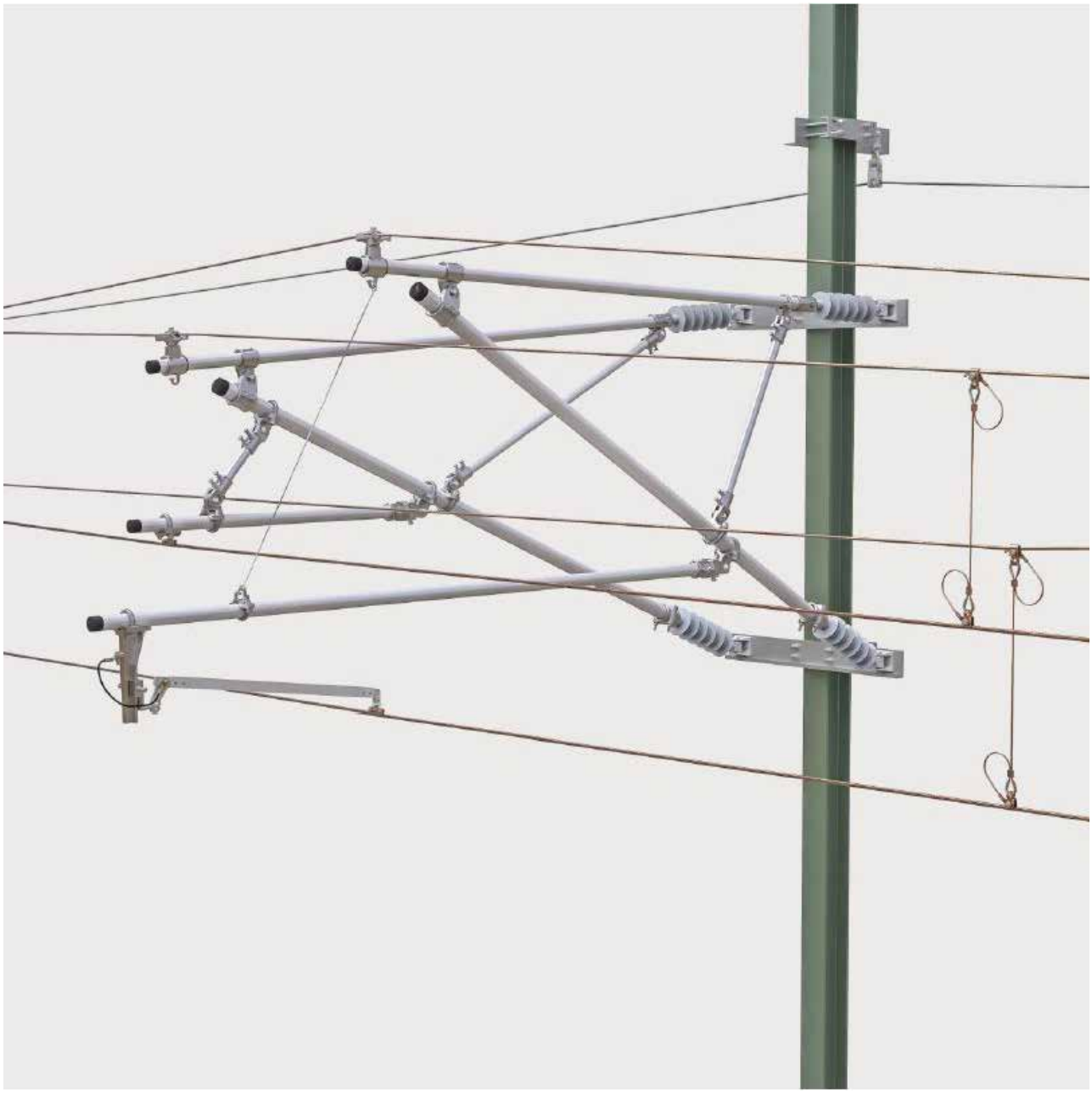
CANTILEVER ASSEMBLIES



Contents

Cantilever with forged aluminium fittings

L.-No.	Type	Tube diameter (Top/Slanting/Bottom) (mm)	Size (mm)
000 701 286-00000	Push-off	55 / 70 / 55	3450
000 701 286-00001	Pull-in	55 / 70 / 55	3450
000 701 264-00000	Out-of-running	55 / 70 / 55	3450

Remark: Reinforcements available on request. Many more cantilever assembly sets available. Please contact Mosdorfer for your requirements or projects.

Application:
- High speed lines
- 15/25 kV AC, 3 kV DC
- Contact wire: AC/BC 80/150
- Messenger wire: up to 150 mm2

Advantages:
- Designed for demands of High Speed Lines.
- Forged fittings with higher strength and working loads.
- Improved corrosion resistance.
- Longer life cycle.
- Intelligent fitting design allows many different cantilever geometries.
- Ideal for maintenance and new railway line projects.

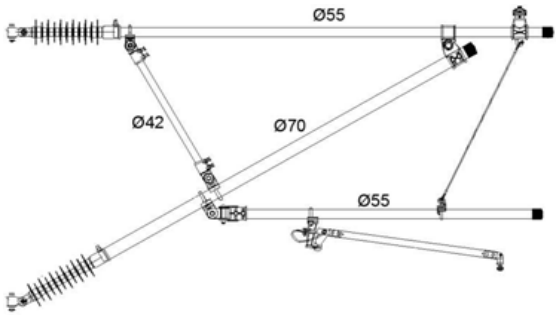
Cantilever with cast aluminium fittings

L.-No.	Type	Tube diameter (Top/Slanting/Bottom) (mm)	Remarks
234 000 001	High Speed lines, pull-in	55 / 70 / 55 / 42	Including steady arm
234 000 006	Conventional lines, pull-in	55 / 70 / 55 / -	Including steady arm
234 000 010	Conventional lines, pull-in	55 / 70 / 42 / -	Including steady arm
234 000 011	Conventional lines	55 / 55 / 42 / -	For overlaps, without steady arm
234 000 012	Conventional lines, pull-in	55 / 55 / 42 / 42	Including steady arm
234 000 013	Conventional lines, push-off	55 / 55 / 42 / -	Including steady arm
234 000 014	Conventional lines, pull-in	55 / 55 / 42 / -	Including steady arm
234 000 015	Conventional lines, push-off	55 / 70 / 55 / 42	Double reinforcement, curved steady arm
234 000 017	Out-of-Running	55 / 70 / 55 / 42	Double reinforcement, without steady arm

Remark: Many more cantilever assembly sets available. Please contact Mosdorfer for your requirements or projects

Application:
- Standard main lines
- 15/25 kV AC, 3 kV DC
- Contact wire: AC/BC 80/150
- Messenger wire: up to 150 mm2

Advantages:
- Cast fittings for all railway applications.
- Costs efficient.
- Many different assembly variants possible.
- Intelligent fitting design allows many different cantilever geometries.
- Ideal for maintenance and new railway line projects



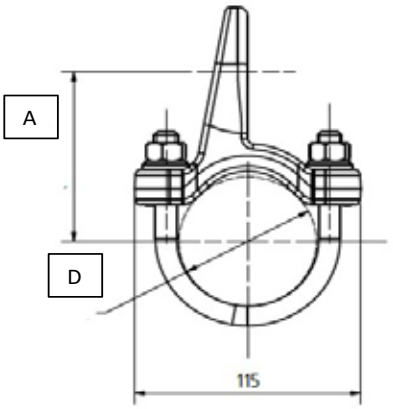
FORGED CANTILEVER COMPONENTS

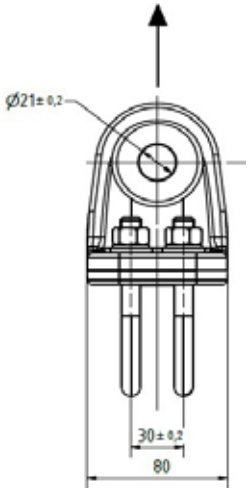
Contents

Eye Clamp

L.-No.	Pipe diameter D (mm)	Height A (mm)	Max. Service Load F (kN)	Bolt (mm)	Tightening Torque (Nm)	Weight (kg)
000 701 290 00000	70	92,1	10,7	M12	35	1,038
000 701 290 00001	55	81,5	10,7	M12	35	0,995

Material:
- Forged double tube holder (EN AW- 6082 T6)
- U-bolt: M12 (Stainless steel A2-70)
- Nuts: M12 INOX UNI 5588 (Stainless steel A2-70)
- Washers: Washer 12x24 ISO 7089 (A2-70)
- Spring washer: M12 UNI 1751 (A2-70)

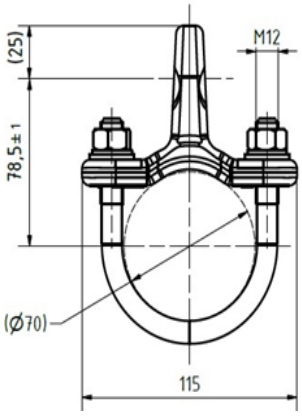


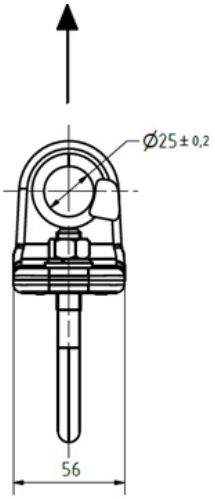


Eye Clamp

L.-No.	Pipe diameter D (mm)	Max. Service Load F (kN)	Bolt (mm)	Tightening Torque (Nm)	Weight (kg)
000 701 291 00001	70	6,786	M12	35	0,523

Material:
- Forged single tube holder (EN AW- 6082 T6)
- U-bolt: M12 (Stainless steel A2-70)
- Nuts: M12 INOX UNI 5588 (Stainless steel A2-70)
- Washers: Washer 12x24 ISO 7089 (A2-70)
- Spring washer: M12 UNI 1751 (A2-70)

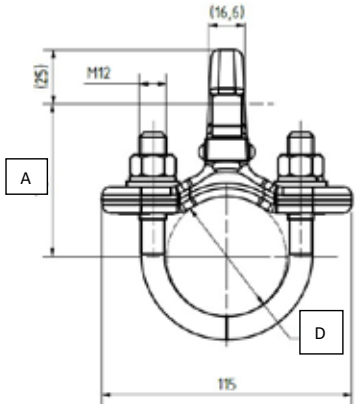


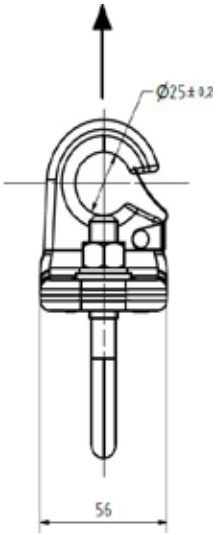


Hook Clamp

L.-No.	Pipe diameter D (mm)	Distance A (mm)	Max. Service Load F (kN)	Bolt (mm)	Tightening Torque (Nm)	Weight (kg)
000 701 292 00000	55	70	1,54	M12	35	0,5
000 701 292 00001	70	77,5	1,54	M12	35	0,52

Material:
- Stay yoke clamping hook – forged (EN AW- 6082 T6)
- U-bolt: M12 (Stainless steel A2-70)
- Nuts: M12 INOX UNI 5588 (Stainless steel A2-70)
- Washers: Washer 12x24 ISO 7089 (A2-70)
- Spring washer: M12 UNI 1751 (A2-70)
- Clip sheet metal (AISI 304)
- Rivet Al-stainless steel



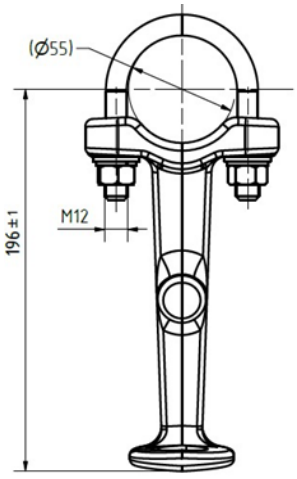


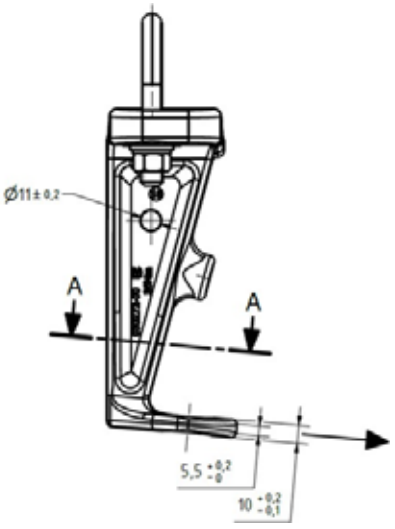
Steady arm Bracket

L.-No.	Pipe diameter D (mm)	Distance A (mm)	Max. Service Load F (kN)	Bolt (mm)	Tightening Torque (Nm)	Weight (kg)
000 701 293 00000	55	2,55	M12	35	0,81	1,038

Application:
- To attach the steady arm to the horizontal support tube

Material:
- Steady arm anchoring – forged (EN AW- 6082 T6)
- U-bolt: M12 (Stainless steel A2-70)
- Nuts: M12 INOX UNI 5588 (Stainless steel A2-70)
- Washers: Washer 12x24 ISO 7089 (A2-70)
- Spring washer: M12 UNI 1751 (A2-70)



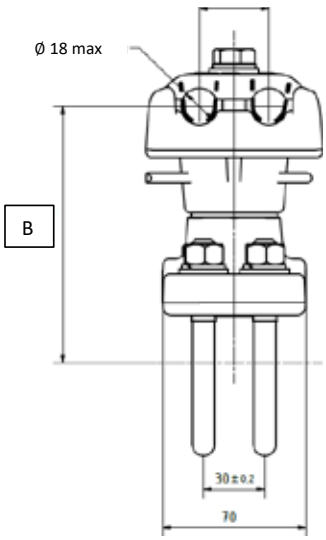


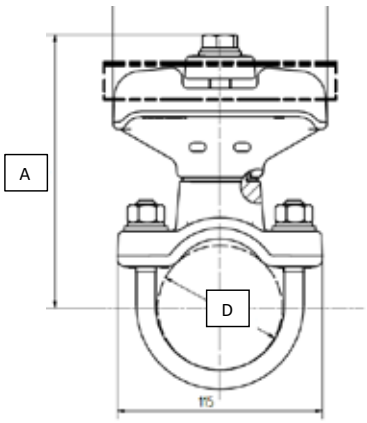
Bridle Suspension

L.-No.	Pipe diameter D (mm)	Height A (mm)	Distance B (mm)	Max. Service Load (kN)	Bolt (mm)	Tightening Torque (Nm)	Weight (kg)
000 701 294 00001	55	142	114	4,524	M12	35 U-Bolt	0,81
000 701 294 00002	70	153	125	4,524	M12	35 U-Bolt	0,81

Application:
- Single and double messenger wire suspension, rotatable.

Material:
- Main wire clamp – forged (EN AW- 6082 T6)
- U-bolt: M12 (Stainless steel A2-70)
- Nuts: M12 INOX UNI 5588 (Stainless steel A2-70)
- Washers: Washer 12x24 ISO 7089 (A2-70)
- Spring washer: M12 UNI 1751 (A2-70)
- Flange bearing Ø 30x16 (Self-lubricating technopolymer)
- Split pin 5x63 ISO 1234 (A2-70)
- Screw hex cap M12x35 tot. thread UNI5739 (A2-70)

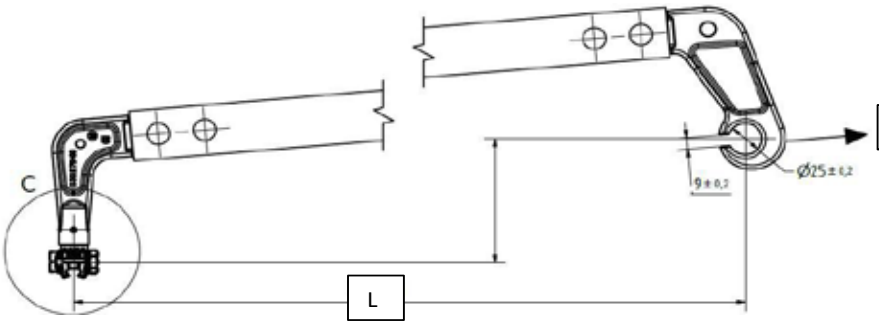




Steady arm, straight

L.-No.	Max. Service Load F (kN)	Length L (mm)	Weight (kg)
000 701 295 00000	2,549	1050	1,17
000 701 295 00001	2,549	900	1,05

Material:
- Hook for steady arm – forged (EN AW- 6082 T6)
- Body pin 5° – forged (EN AW- 6082 T6)
- Round head rivet (EN AW-6082 S T0)
- Tube rectangular 40x20x2,5, L=952mm (EN AW- 6082 T6)
- Pin (AISI 304)

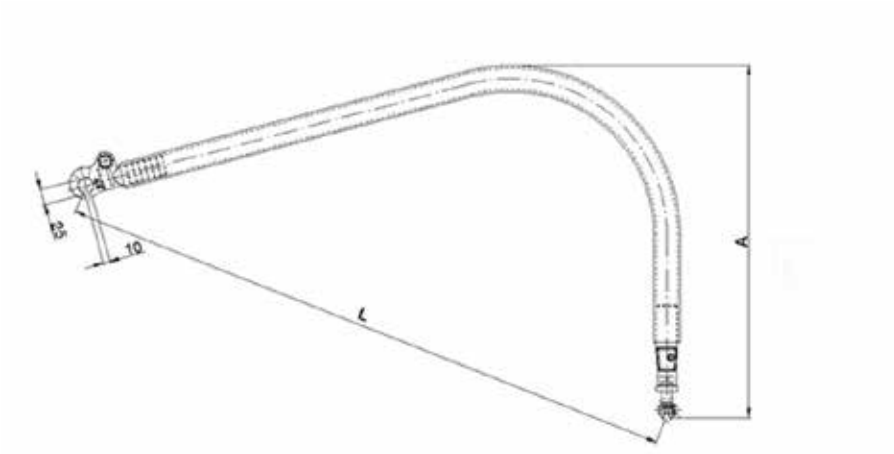


Steady arm, curved

L.-No.	Max. Service Load F (kN)	Length L (mm)	Weight (kg)
000 701 338 00000	1,56	968	2,274
000 701 338 00001	1,36	1000	2,418

Anwendung:
- Steady arm in overlap

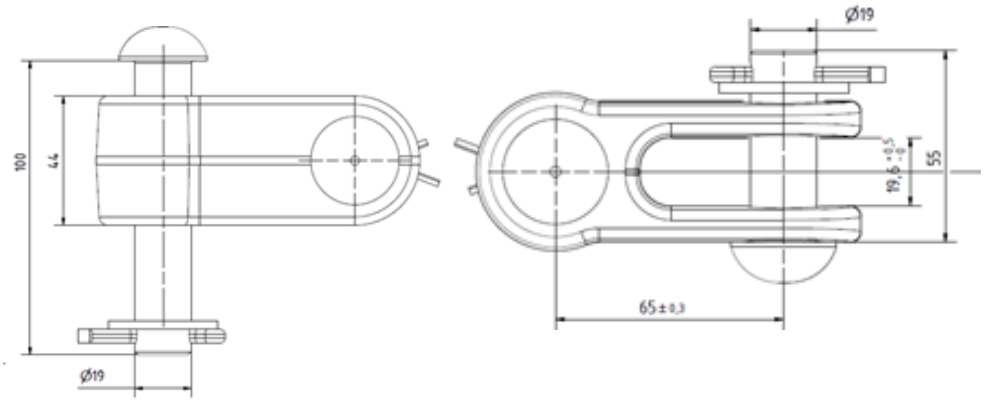
Material:
- Hook for steady arm – forged (EN AW- 6082 T6)
- Body pin 5° – forged (EN AW- 6082 T6)
- Round head rivet (EN AW-6082 S T0)
- Tube rectangular 40x20x2,5, L=952mm (EN AW- 6082 T6)
- Pin (AISI 304)



Swivel with Clevis

L.-No.	Min. failing Load (kN)	Weight (kg)
000 701 297 00000	> 60	1,268

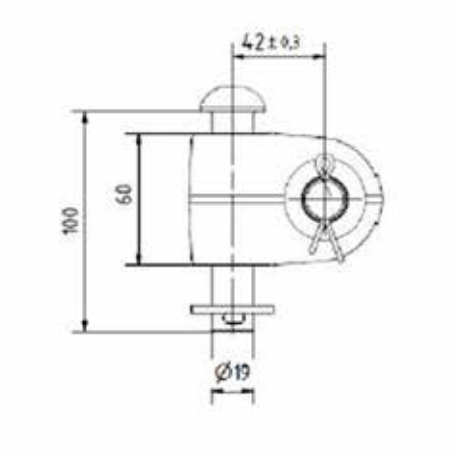
Material:
- Swivel clevis for Al cantilever - forged (S355JR EN 10025), hdg
- Pins Ø 19 L=55mm and 100mm – forged (S355JR EN 10025), hdg
- Washers: Washer M20 UNI 6592 (A2-70)
- Split pin Ø 5x35 UNI 1336 (A2-70)

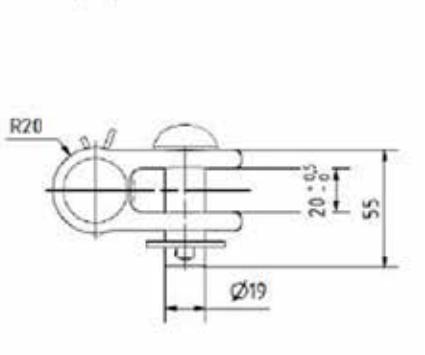


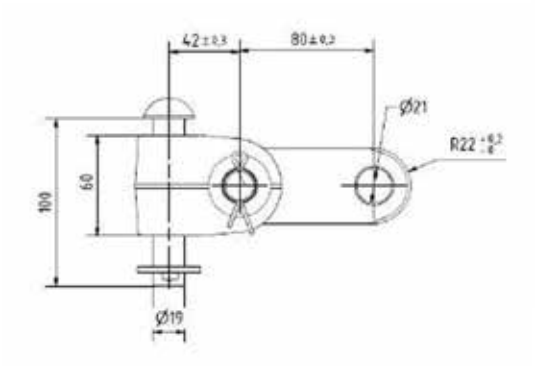
Swivel with Clevis and Plate

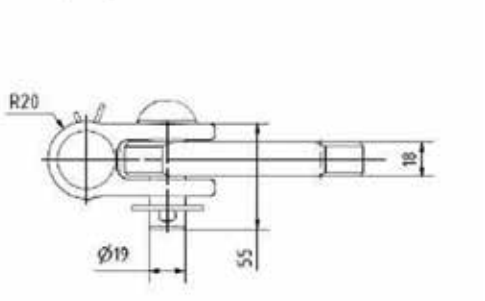
L.-No.	Min. failing Load (kN)	Weight (kg)
000 701 303 00000	> 80	1,606
000 701 303 00001	> 80	0,983

Material:
- Swivel back fork TRC+ - forged (C45 EN 10083)
- Pins Ø 19 L=55mm and 100mm – forged (S355JR EN 10025), hdg
- Plate with 2 holes Ø 21, L=80mm – C 40 UNI 7845
- Washers: Washer M20 UNI 6592 (A2-70)
- Split pin Ø 5x35 UNI 1336 (A2-70)





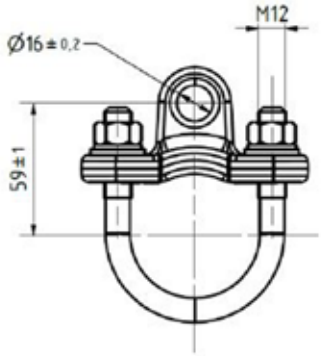




Eye Clamp for Windstay

L.-No.	Pipe diameter (mm)	Min. failing Load (kN)	Bolt (mm)	Tightening Torque (Nm)	Weight (kg)
000 701 298 00000	55	> 6	M12	35	0,327

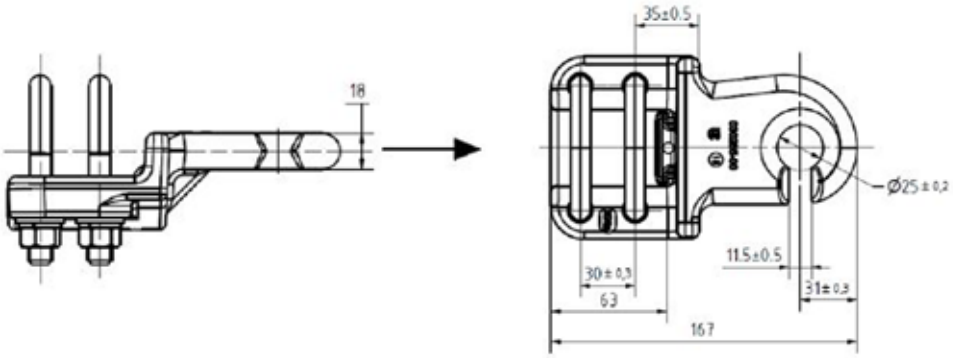
Material:
- Eye Clamp Ø 55 for windstay, forged (EN AW- 6082 T6)
- U-bolt: M12 (Stainless steel A2-70)
- Nuts: M12 INOX UNI 5588 (Stainless steel A2-70)
- Washers: Washer 12x24 ISO 7089 (A2-70)
- Spring washer: M12 UNI 1751 (A2-70)

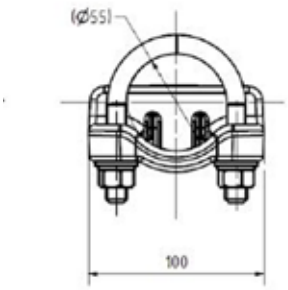


End fitting with Hook

L.-No.	Pipe diameter (mm)	Min. failing Load (kN)	Bolt (mm)	Tightening Torque (Nm)	Weight (kg)
000 701 299 00000	55	4,524	M12	35	1,053

Material:
- Hook end fitting Ø 55, forged (EN AW- 6082 T6)
- U-bolt: M12 (Stainless steel A2-70)
- Nuts: M12 INOX UNI 5588 (Stainless steel A2-70)
- Washers: Washer 12x24 ISO 7089 (A2-70)
- Spring washer: M12 UNI 1751 (A2-70)





CAST CANTILEVER COMPONENTS

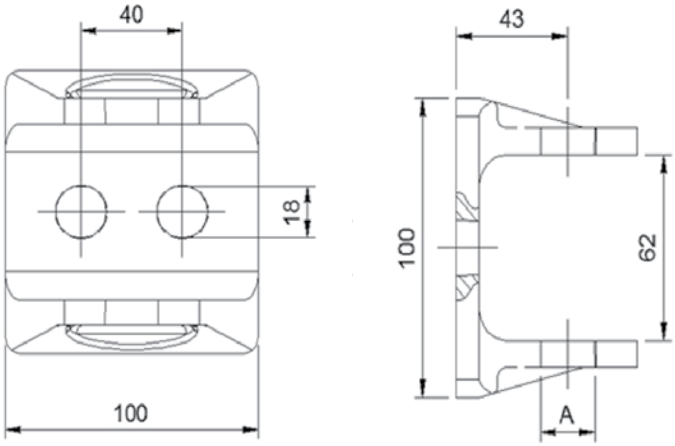
Contents

Swivel Bracket

L.-No.	ID-Code	Dimension A (mm)	Weight (kg)
234 022 017	SGM-01	17	0,496
231 022 021	SGM-05	21	0,496

Application:
- Suspension of cantilevers. Swivel joint in combination with various cantilever supports.
- This part is used for the rotatable suspension of cantilevers

Material:
- Cast part: AlSi7Mg 0,6 T6 (UNE-EN 1706)

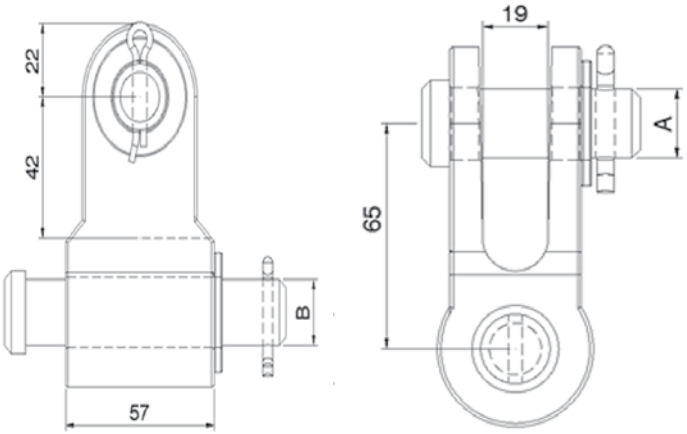


Cantilever Support with Clevis

L.-No.	ID-Code	Material	Bolt Diameter A (mm)	Bolt Diameter B (mm)	Weight (kg)
234 001 001	ASM.SSP-01	AlSi7Mg0,6 T6 (UNE-EN 1706)	20	16	-
234 001 002	ASM.SSP-02	C-45 (EN-10083)	20	20	0,78
234 001 003	ASM.SSP-03	AlSi7Mg0,6 T6 (UNE-EN 1706)	20	20	0,51
234 001 004	ASM.SSP-04	C-45 (EN-10083)	17	20	-
234 001 005	ASM.SSP-05	AlSi7Mg0,6 T6 (UNE-EN 1706)	17	20	-

Application:
- Rotatable attachment of cantilevers to poles.
- This part is a swivel joint with clevis for cantilevers

Material:
- Part: See table below
- Clevis pin: St. Steel (A2) (EN ISO 3506)
- Split pin: St. Steel (1.4301 UNE-EN 10088)
- Washers: St. Steel (A2) (EN ISO 3506)

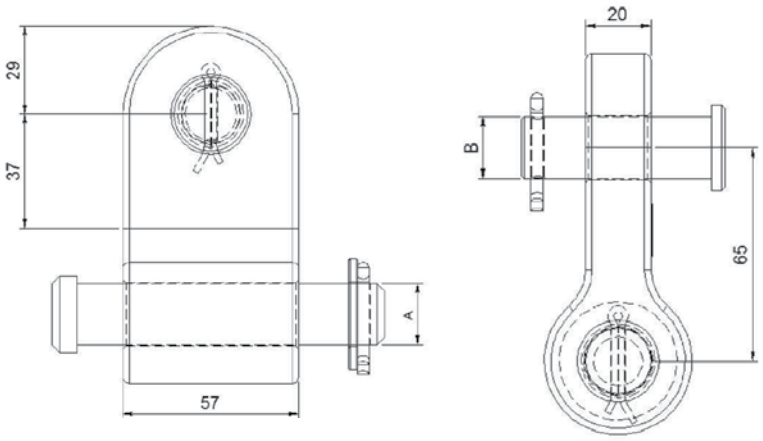


Cantilever Support with Tongue

L.-No.	ID-Code	Material	Bolt Diameter A (mm)	Bolt Diameter B (mm)	Weight (kg)
234 002 001	ASM.SIP-01	AlSi7Mg0,6 T6 (UNE-EN 1706)	16	16	0,687

Application:
- Rotatable attachment for cantilevers to poles.
- This part is a swivel joint with tongue for cantilevers

Material:
- Cast part: See table above
- Clevis pin: St. Steel (A2) (EN ISO 3506)
- Split pin: St. Steel (1.4301 UNE-EN 10088)
- Washers: St. Steel (A2) (EN ISO 3506)

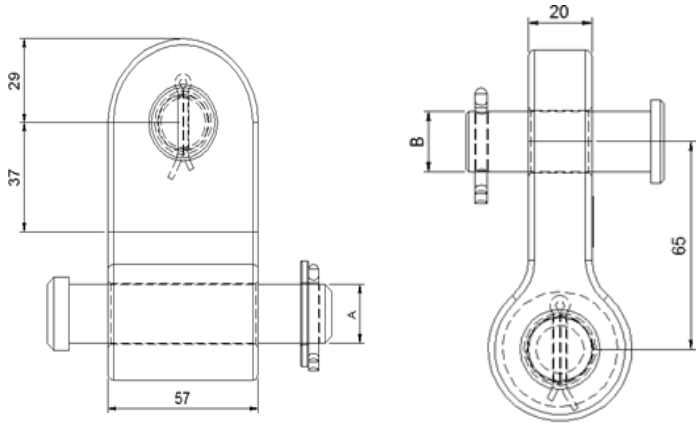


Cantilever Support with Tongue

L.-No.	ID-Code	Material	Bolt Diameter A (mm)	Bolt Diameter B (mm)	Weight (kg)
234 002 002	ASM.SIP-02	AlSi7Mg0,6 T6 (UNE-EN 1706)	20	19	0,82
234 002 003	ASM.SIP-03	AlSi7Mg0,6 T6 (UNE-EN 1706)	20	16	0,82

Application:
- Rotatable attachment for cantilevers to poles.
- This part is a swivel joint with tongue for cantilevers

Material:
- Cast part: See table above
- Clevis pin: St. Steel (A2) (EN ISO 3506)
- Split pin: St. Steel (1.4301 UNE-EN 10088)
- Washers: St. Steel (A2) (EN ISO 3506)

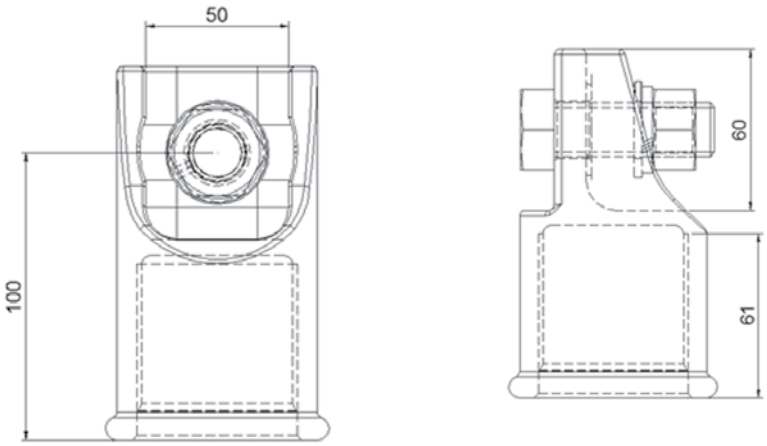


Threaded Tongue End fitting

L.-No.	ID-Code	Diameter tube (mm)	Tightening torque M20 (Nm)	Weight (kg)
234 003 055	ASM.UTA-55R	55	135	0,877

Application:
- Threaded end fitting
- This part is used to connect the traction insulator with the top cantilever tube.

Material:
- Cast part: AlSi7Mg 0,6 T6 (UNE-EN 1706)
- Screws: St. Steel (A2-70) (UNE-EN ISO 3506)
- Nuts: St. Steel (A2-70) (UNE- EN ISO 3506)
- Washers: St. Steel (A2) (UNE- EN ISO 3506)

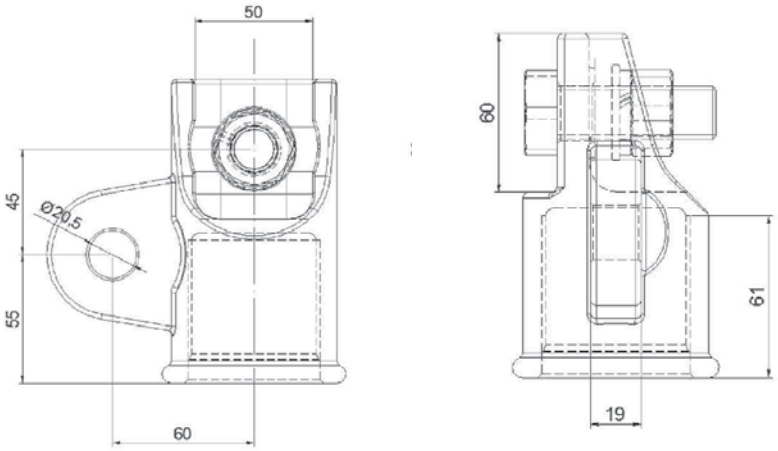


Threaded Tongue T-End fitting

L.-No.	ID-Code	Diameter tube (mm)	Tightening torque M20 (Nm)	Weight (kg)
234 003 155	ASM.UTA-55RT	55	135	1,020

Application:
- Threaded end fitting
- This part is used to connect the traction insulator with the top cantilever tube.

Material:
- Cast part: AlSi7Mg 0,6 T6 (UNE-EN 1706)
- Screws: St. Steel (A2-70) (UNE-EN ISO 3506)
- Nuts: St. Steel (A2-70) (UNE- EN ISO 3506)
- Washers: St. Steel (A2) (UNE- EN ISO 3506)

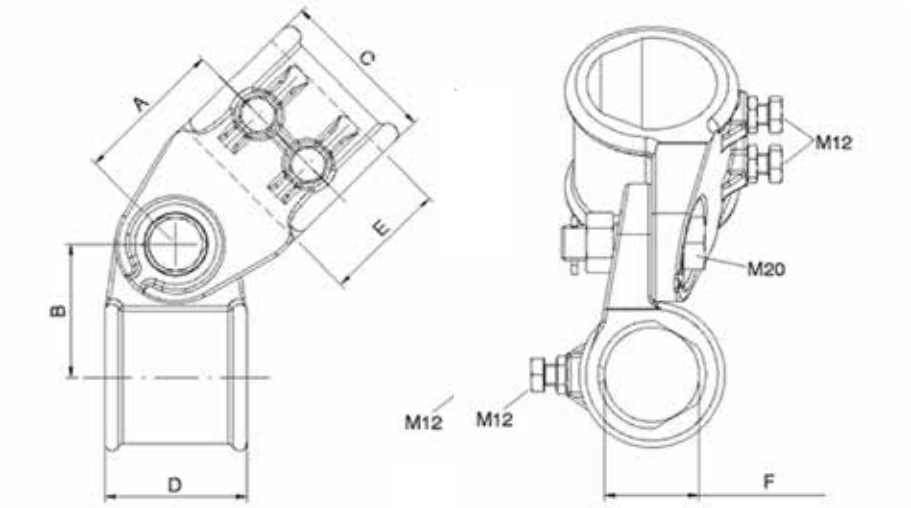


Double Tube Holder Clamp

L.-No.	ID-code	Diameter tube		Dimensions				Tightening torque		Weight (kg)
		Tube E	Tube F	A	B	C	D	M12	M20	
234 004 555	ASM.SUT-55.55	55	55	76	76	80	80	58	135	1,80
234 004 570	ASM.SUT-55.70	55	70	85	76	90	80	58	135	2,02
234 004 770	ASM.SUT-70.70	70	70	85	85	90	90	58	135	2,26

Application:
- This clamp is used to connect the cantilever tube with the top tube

Material:
- Cast part: AlSi7Mg 0,6 T6 (UNE-EN 1706)
- Screw:
  -M20: St. Steel (A2-70) (UNE-EN ISO 3506)
  -M12: St. Steel (A2-80) (UNE-EN ISO 3506)
- Nuts:
  - M20: St. Steel (A2-70) (UNE- EN ISO 3506)
  -M12: St. Steel (A2-35) (UNE- EN ISO 3506)
- Washers: St. Steel (A2) (UNE-EN ISO 3506)
- Pin: St. Steel A2 (UNE-EN ISO 3506)

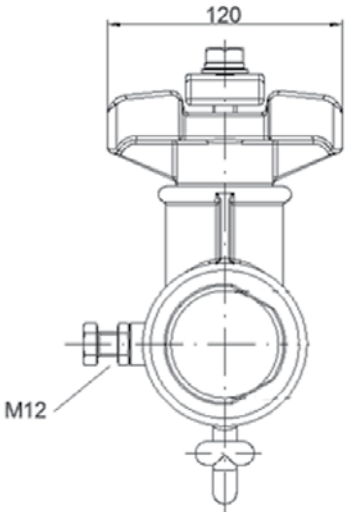


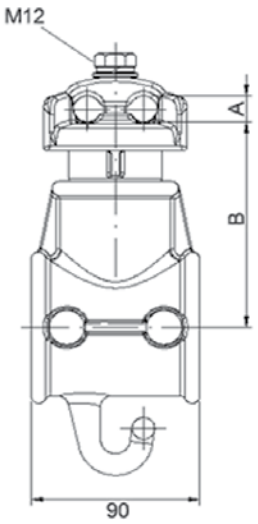
Bridle Suspension with Hook

L.-No.	ID-code	Diameter tube	Messenger wire cross section	Dimensions		Tightening torque	Weight (kg)
				A	B		
234 005 055	ASM.SUS-55	55	65-150	13-18	114	58	1,13
234 005 070	ASM.SUS-70	70	65-150	13-18	121	58	1,53

Application:
- Single and double messenger wire suspension, rotatable.
- This clamp is used to connect the messenger wire with the top tube

Material:
- Cast part: AlSi7Mg 0,6 T6 (UNE-EN 1706)
- Screw: St. Steel (A2-70) (UNE-EN ISO 3506)
- Screw St. Steel (A2-80) (UNE-EN ISO 3506)
- Nuts: St. Steel (A2-35) (UNE- EN ISO 3506)
- Washers: St. Steel (A2) (UNE-EN ISO 3506)



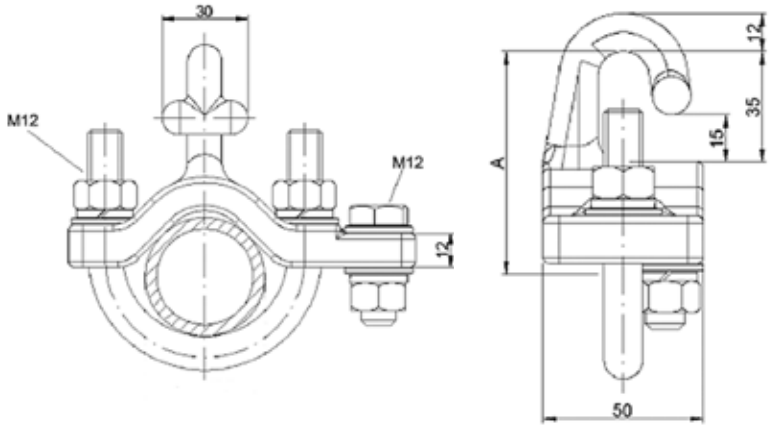


Hook Clip

L.-No.	ID-code	Diameter tube	Dimension (mm)	Tightening torque M12 (Nm)	Weight (kg)
234 006 042	ASM.SGD-42	42	70	45	0,42
234 006 055	ASM.SGD-55	55	79	58	0,42

Application:
- This part is used to connect the cantilever dropper with the registration tube
- Cantilever dropper

Material:
- Cast part: AlSi7Mg 0,6 T6 (UNE-EN 1706)
- Screws: St. Steel (A2-70) (UNE-EN ISO 3506)
- Nuts: St. Steel (A2-70) (UNE-EN ISO 3506)
- Washers: St. Steel (A2) (UNE-EN ISO 3506)
- U-bolt: St. Steel (A2-70) (UNE-EN ISO 3506)

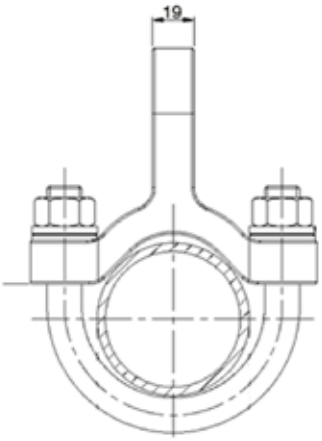


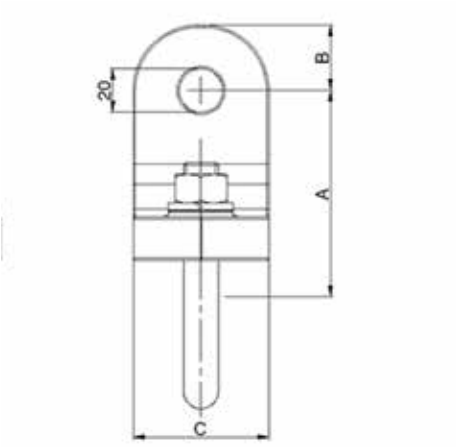
Eye Clamp

L.-No.	ID-code	Diameter tube	Dimension			U-bolt	Torque (mm)	Weight (kg)
			A	B	C			
234 007 042	ASM.SUG-42	42						
234 007 055	ASM.SUG-55	55	78	25	50	M12	58	0,49
234 007 070	ASM.SUG-70	70	94	30	62,5	M16	85	0,64

Application:
- This clamp is used for articulated connections

Material:
- Cast part: AlSi7Mg 0,6 T6 (UNE-EN 1706)
- Nuts: St. Steel (A2-70) (EN ISO 3506)
- Washers: St. Steel (A2) (EN ISO 3506)
- U-bolt: St. Steel (A2-70) (EN ISO 3506)



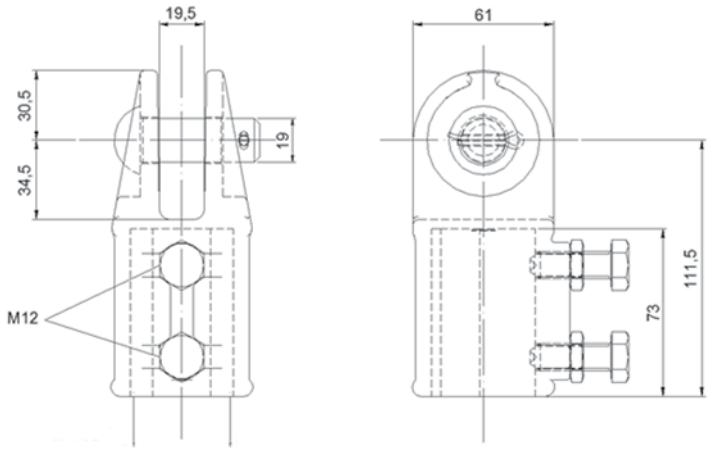


Clevis End Fitting

L.-No.	ID-Code	Diameter tube (mm)	Tightening torque M12 (Nm)	Weight (kg)
234 008 042	ASM.UTA-42	42	45	0,58

Application:
- This part is used to connect the support tube with the cantilever tube or the top tube

Material:
- Cast part: AlSi7Mg 0,6 T6 (UNE-EN 1706)
- Screws: St. Steel (A2-80) (UNE-EN ISO 3506)
- Nuts: St. Steel (A2-35) (UNE- EN ISO 3506)
- Clevis pin: Aluminium
- Split pin: St. Steel 1.4301 (UNE-EN 10088)

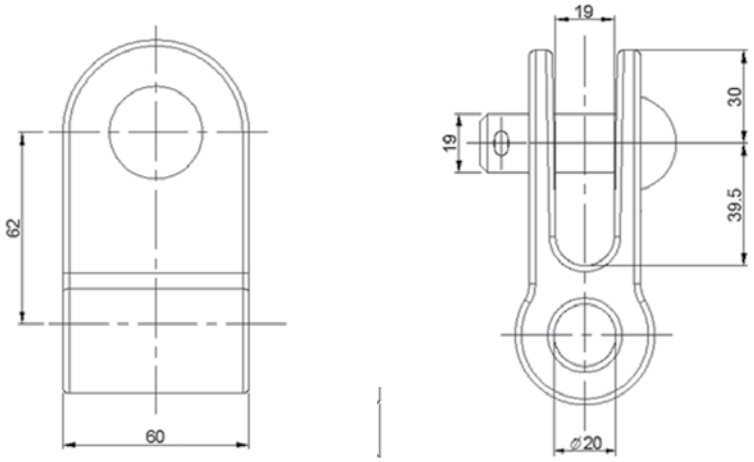


Fork Joint

L.-No.	ID-Code	Clevis pin (mm)	Weight (kg)
234 009 001	ASM.STG-01	19	0,425

Application:
- Fork joint in combination with 234 010 042 or 234 010 055
- This part is used to connect cantilever tube with the registration tube

Material:
- Cast part: AlSi7Mg 0,6 T6 (UNE-EN 1706)
- Clevis pin: Aluminium
- Split pin: St. Steel 1.4301 (UNE-EN 10088)

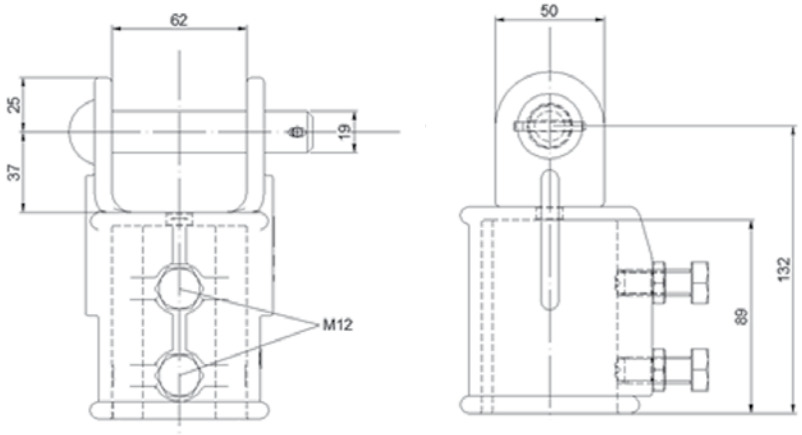


Clevis End Fitting

L.-No.	ID-Code	Diameter tube (mm)	Tightening torque M12 (mm)	Weight (kg)
234 010 042	ASM.UTA-42A	42	45	0,86
234 010 055	ASM.UTA-55	55	58	0,58

Application:
- Articulated connection in combination with fork joint 234 009 001
- This part is used to connect the registration tube with the cantilever tube

Material:
- Cast part: AlSi7Mg 0,6 T6 (UNE-EN 1706)
- Screws: St. Steel (A2-80) (UNE-EN ISO 3506)
- Nuts: St. Steel (A2-35) (UNE- EN ISO 3506)
- Clevis pin: Aluminium
- Split pin: St. Steel 1.4301 (UNE-EN 10088

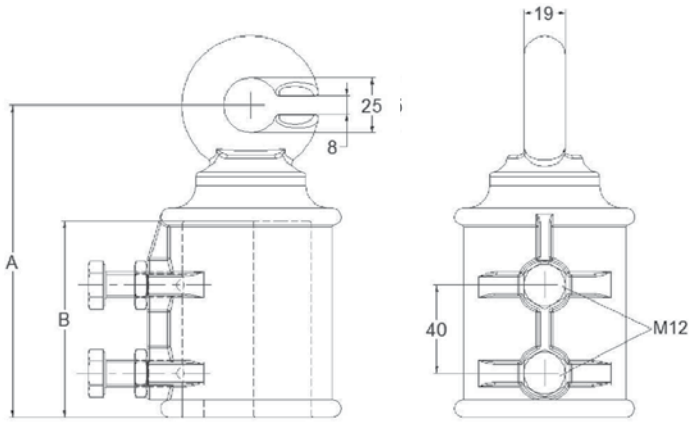


Hook End Fitting

L.-No.	ID-Code	Diameter tube (mm)	Dimension		Tightening torque (Nm)	Weight (kg)
			A	B		
234 011 042	ASM.UGG-42	42	108,7	69	45	0,70
234 011 055	ASM.UGG-55	55	141,5	89	58	0,77

Application:
- This fitting is used to connect the cantilever tube with the registration tube

Material:
- Cast part: AlSi7Mg 0,6 T6 (UNE-EN 1706)
- Screws: St. Steel (A2-80) (UNE-EN ISO 3506)
- Nuts: St. Steel (A2-35)(UNE- EN ISO 3506)

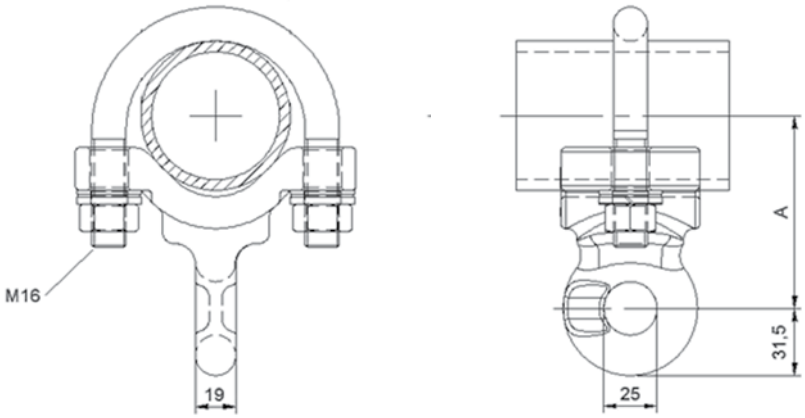


Eye Clamp

L.-No.	ID-Code	Diameter tube (mm)	Dimension A (mm)	Tightening torque M16 (Nm)	Weight (kg)
234 012 055	ASM.SUA-55	55	80	58	0,91
234 012 070	ASM.SUA-70	70	90	85	0,91

Application:
- This clevis is used to connect the registration tube with the cantilever tube

Material:
- Cast part: AlSi7Mg 0,6 T6 (UNE-EN 1706)
- Nuts: St. Steel (A2-70) (UNE- EN ISO 3506)
- Washers: St. Steel (A2) (UNE-EN ISO 3506)
- U-bolt: St. Steel (A2-70) (UNE-EN ISO 3506)

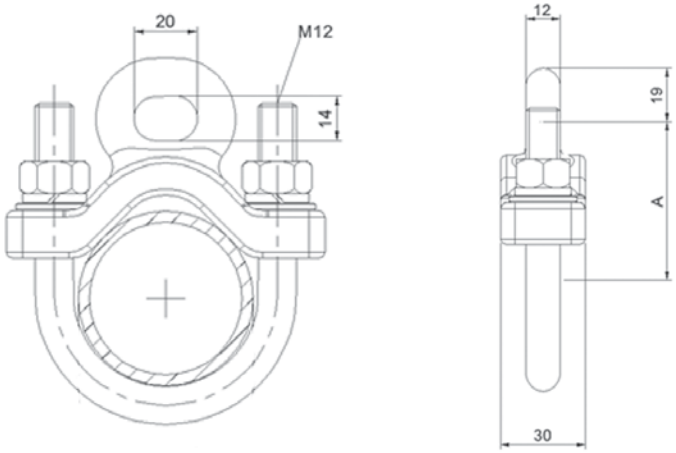


Eye Clamp for Windstay

L.-Np.	ID-Code	Diameter tube (mm)	Dimension A (mm)	Tightening torque M12 (Nm)	Weight (kg)
234 013 042	ASM.SAG-42	42	47	45	0,35
234 013 055	ASM.SAG-55	55	56	58	0,35

Application:
- This clamp is used to connect the anti-wind hanger with the registration tube

Material:
- Cast part: AlSi7Mg 0,6 T6 (UNE-EN 1706)
- Nuts: St. Steel (A2-70) (UNE- EN ISO 3506)
- Washers: St. Steel (A2) (UNE-EN ISO 3506)
- U-bolt: St. Steel (A2-70) (UNE-EN ISO 3506)



Windstay

L.-No.	ID-Code	Length (mm)	Weight (kg)
234 014 065	AV-650	650	0,046
234 014 095	AV-950	950	0,070
234 014 100	AV-1000	1000	0,074
234 014 105	AV-1050	1050	0,078
234 014 110	AV-1100	1100	0,082

Application:
- This part is used to connect the registration tube with the steady arm as a windstay
- Used for cantilevers with forged and casted components

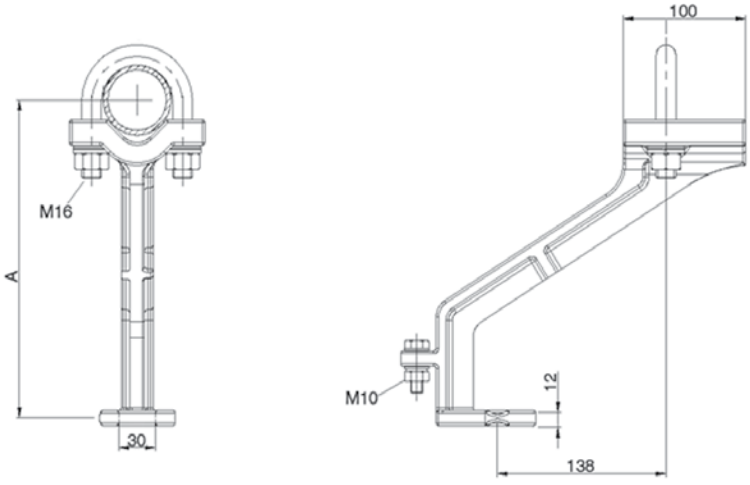
Material:
- Part: St. Steel
- Washer: St. Steel

Steady Arm Bracket

L.-No.	ID-Code	Diameter tube (mm)	Dimension A (mm)	Tightening torque		Weight (kg)
				M16	M10	
234 015 042	ASM.SCB-42	42	240	58	38	1,68
234 015 055	ASM.SCB-55	55	250	85	38	1,68

Application:
- This clamp is used to connect the steady arm with the registration tube

Material:
- Cast part: AlSi7Mg 0,6 T6 (UNE-EN 1706)
- Screw: St. Steel (A2-70) (EN ISO 3506)
- Nuts: St. Steel (A2-70) (UNE-EN ISO 3506)
- Washers: St. Steel (A2) (UNE-EN ISO 3506)
- U-bolt: St. Steel (A2-70) (EN ISO 3506)

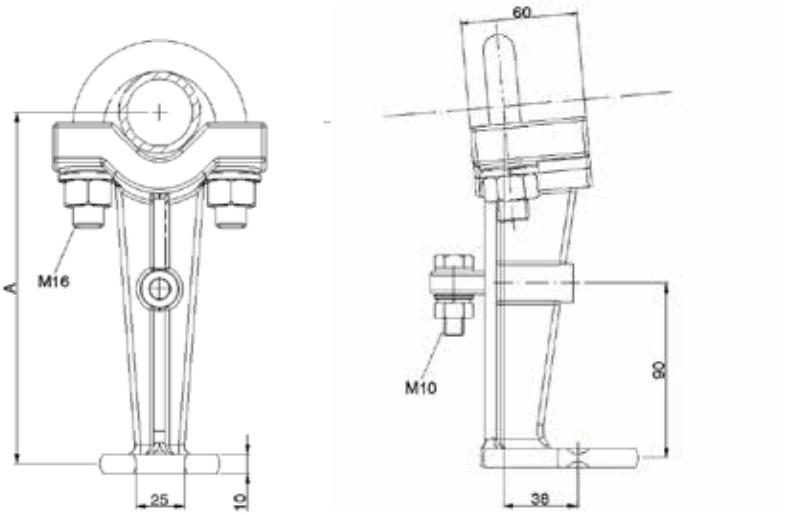


Steady Arm Bracket

L.-No.	ID-Code	Diameter tube (mm)	Dimension A (mm)	Tightening torque		Weight (kg)
				M16	M10	
234 016 042	ASM.SFB-42	42	180	58	38	0,77
234 016 055	ASM.SFB-55	55	189	85	38	0,77

Application:
- This clamp is used to connect the steady arm with the registration tube

Material:
- Cast parts : AlSi7Mg 0,6 T6 (UNE-EN 1706)
- Screw: St. Steel (A2-70) (EN ISO 3506)
- Nuts: St. Steel (A2-70) (UNE-EN ISO 3506)
- Washers: St. Steel (A2) (UNE-EN ISO 3506)
- U-bolt: St. Steel (A2-70) (EN ISO 3506)

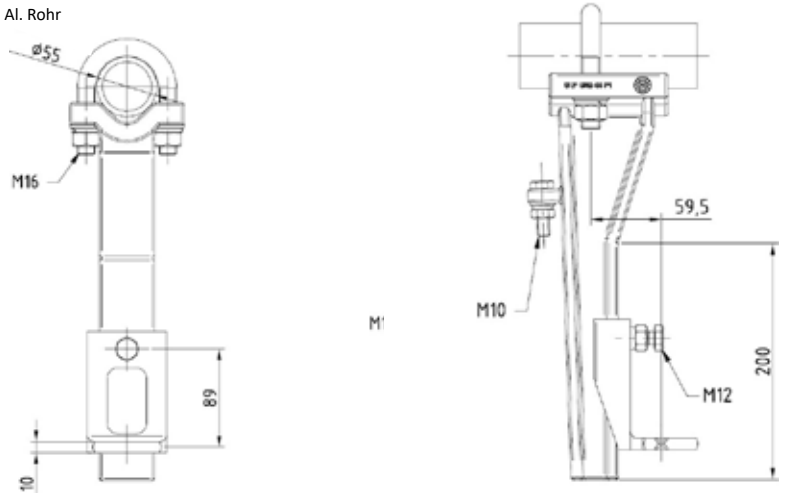


Adjustable Steady Arm Bracket

L.-No.	ID-Code	Diameter tube (mm)	Dimension A (mm)	Tightening torque		Weight (kg)
				M16	M10	
234 017 042	ASM.SRB-42	42	348	58	38	2,87
234 017 055	ASM.SRB-55	55	357	85	38	2,87

Application:
- Steady arm support
- This clamp is used to connect two steady arms with the registration tube

Material:
- Cast part: AlSi7Mg 0,6 T6 (UNE-EN 1706)
- Screws: St. Steel (A2-70) (EN ISO 3506)
- Nuts: St. Steel (A2-70) (UNE-EN ISO 3506)
- Washers: St. Steel (A2) (UNE-EN ISO 3506)
- U-bolt: St. Steel (A2-70) (EN ISO 3506)

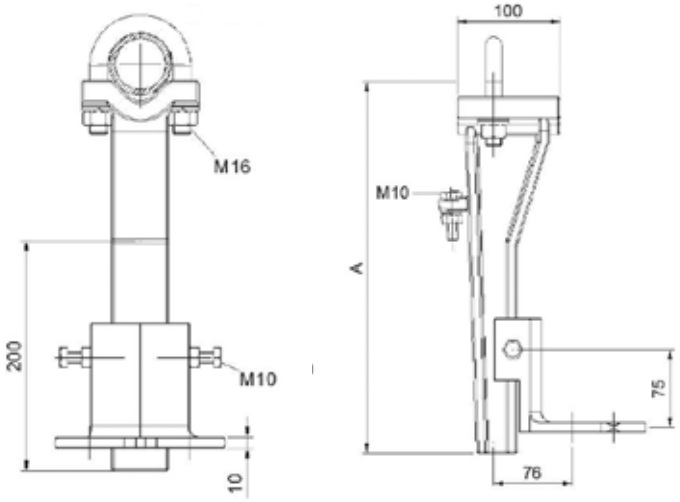


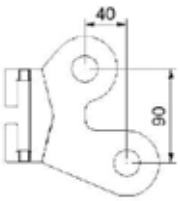
Adjustable Double Steady Arm Bracket

L.-No.	ID-Code	Diameter tube (mm)	Dimension A (mm)	Tightening torque		Weight (kg)
				M16	M10	
234 017 042	ASM.SRB-42	42	348	58	38	2,87
234 017 055	ASM.SRB-55	55	357	85	38	2,87

Application:
- Double steady arm support
- This clamp is used to connect two steady arms with the registration tube

Material:
- Cast part: AlSi7Mg 0,6 T6 (UNE-EN 1706)
- Screws: St. Steel (A2-70) (EN ISO 3506)
- Nuts: St. Steel (A2-70) (UNE-EN ISO 3506)
- Washers: St. Steel (A2) (UNE-EN ISO 3506)
- U-bolt: St. Steel (A2-70) (EN ISO 3506)





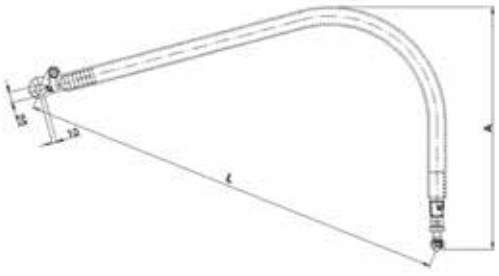
Steady Arm curved

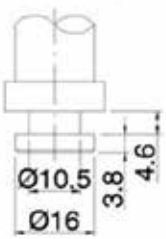
L.-No.	ID-Code	Length (mm)		Pivot (mm)	Weight (kg)
		L	A		
234 019 100	ABAT-1000C	1000	568	16	1,99
234 019 097	ABAT-1000C V1	968	468	16	1,95

Application:
- Steady arm in overlap
- This part is used to connect the cantilever with the contact wire clip

Material:
- Cast parts: AlSi7Mg 0,6 T6 (UNE-EN 1706)
- Tubular tube: EN AW-6082 (UNE-EN 573)
- Screws: St. Steel (A2-70) (UNE-EN ISO 3506)
- Nuts: St. Steel (A2-70) (UNE-EN ISO 3506)
- Washers: St. Steel (A2) (UNE-EN ISO 3506)
- Pivot: St. Steel (A2) (UNE-EN ISO 3506)

Remarks:
Other length available on request.
Screw, nut and washer for earthing connection included (M10) Contact wire clip supplied separatly.





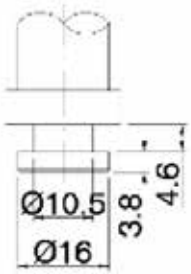
Steady Arm angled

L.-No.	ID-Code	Length L (mm)	Pivot (mm)	Weight (kg)
234 020 115	ABAT-1150C	1500	16	1,55

Application:
- This part is used to connect the cantilever with the contact wire clip

Material:
- Cast parts: AlSi7Mg 0,6 T6 (UNE-EN 1706)
- Rectangular tube: EN AW-6082 T6 S/UNE-EN 573
- Rivet: EN AW-Al 99,5 S/UNE-EN 573
- Screws: St. Steel (A2-70) (UNE-EN ISO 3506)
- Nuts: St. Steel (A2-70) (UNE-EN ISO 3506)
- Washers: St. Steel (A2) (UNE-EN ISO 3506)

Remarks:
Other length available on request.
Screw, nut and washer for earthing connection included (M10) Contact wire clip supplied separatly.



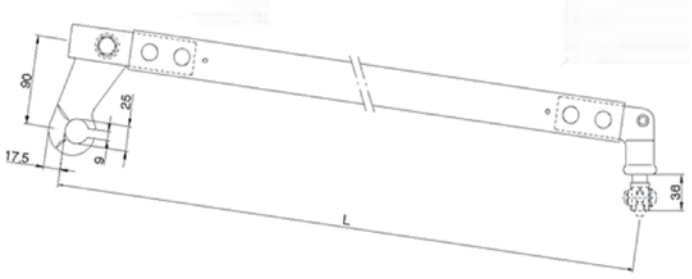
Steady Arm straight

L.-No.	ID-Code	Length L (mm)	Weight (kg)
234 021 080	ABATC-800	800	1,16
234 021 085	ABATC-850	850	1,18
234 021 087	ABATC-875	875	1,19
234 021 090	ABATC-900	900	1,20
234 021 095	ABATC-950	950	1,22
234 021 100	ABATC-1000	1000	1,25
234 021 105	ABATC-1050	1050	1,28
234 021 110	ABATC-1100	1100	1,30
234 021 115	ABATC-1150V	1150	1,33
234 021 120	ABATC-1200	1200	1,36
234 021 125	ABATC-1250	1250	1,38
234 021 130	ABATC-1300	1300	1,40
234 021 138	ABATC-1385	1385	1,43
234 021 140	ABATC-1400	1400	1,44

Application:
- This part is used to connect the cantilever with the contact wire clip

Material:
- Cast parts: AlSi7Mg 0,6 T6 (UNE-EN 1706)
- Rectangular tube: EN AW-6082 T6 S/UNE-EN 573
- Rivet: EN AW-Al 99,5 S/UNE-EN 573
- Screws: St. Steel (A2-70) (UNE-EN ISO 3506)
- Nuts: St. Steel (A2-70) (UNE-EN ISO 3506)
- Washers: St. Steel (A2) (UNE-EN ISO 3506)
- Pivot: St. Steel (A2) (UNE-EN ISO 3506)

Remarks:
Contact wire clip supplied separatly
Screw, nut and washer for earthing connection included (M10

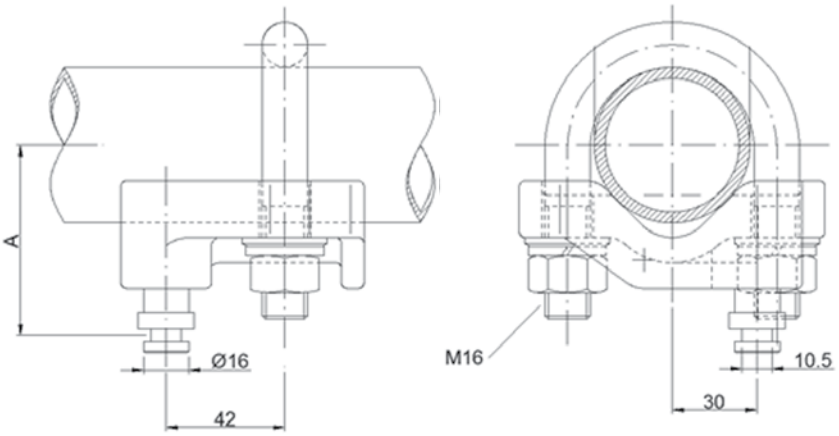


Contact Wire Clip Holder Clamp

L.-No.	ID-Code	Diameter Al tube (mm)	Dimension A (mm)	Tightening torque M16 (Nm)	Weight (kg)
234 027 042	ASM.SGH-42	42	67	58	0,83
234 027 055	ASM.SGH-55	55	58	85	0,83

Application:
- Clamp Wire holder
- Overlap
- This clamp is used for out of running of the contact wire clip

Material:
- Cast part: AlSi7Mg 0,6 T6 (UNE-EN 1706)
- Nuts: St. steel (A2-70) (EN ISO 3506)
- Washers: St. Steel (A2) (EN ISO 3506)
- U-bolt: St. Steel (A2-70) (EN ISO 3506)
- Pivot: St. Steel (A2) (UNE-EN ISO 3506



Bimetallic Sleeve

L.-No.	ID-Code	Dimensions (mm)				Compression tool	Weight (kg)
		A	B	C	D		
234 023 090	BIMET 9	30,5	130	9	1	HG BIMET	0,016
234 023 105	BIMET 10,5	35	130	10,5	1	HG BIMET 12	0,018
234 023 130	000.025.023.V4	43	130	13	1	HG BIMET 15	0,025
234 023 145	BIMET 120	47,5	130	14,5	1	HG BIMET 17	0,026
234 023 165	BIMET 153	52	130	16,5	1	HG BIMET 18,5	0,028

Application:
- This sleeve provides bimetallic connection between the messenger wire and the catenary wire support clamp
- Used for cantilevers with forged and casted components

Material:
- CUPAL

Cantilever Tubes

L.-No.	ID-Code	Exterior diameter A (mm)	Internal diameter B (mm)
234 028 042	TA-42-4-X *)	42	34
234 028 055	TA-55-6-X *)	55	43
234 028 070	TA-70-6-X *)	70	58

*) X in metres

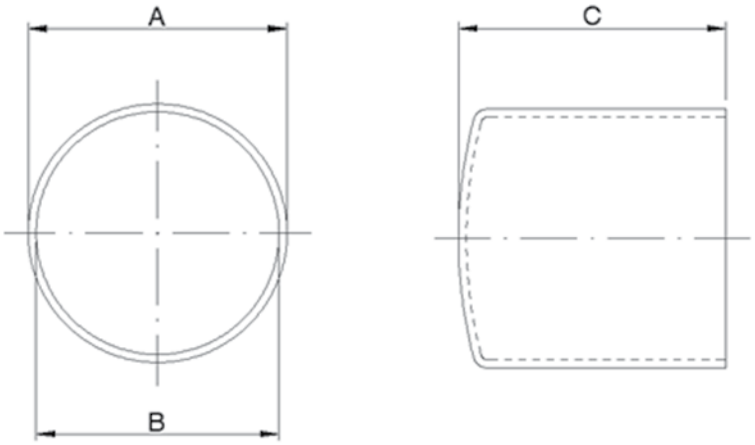
Application:
- Top tube
- Cantilever tube
- Registration tube
- Support tube
- These tubes are used for aluminium cantilever with forged and casted components

Material:
- Tube: EN AW-6082 T6 or EN AW-6063 T6

Tube Cap

L.-No.	ID-Code	Diameter tube (mm)	Dimensions (mm)		
			A	B	C
234 024 042	TP-42	42	42	41,8	46
234 024 055	TP-55	55	55	51,6	57
234 024 070	TP-70	70	70	67,8	57

Application:
- End cap for aluminium tubes
- This cap is used for cantilever tubes for cantilevers with forged and casted components



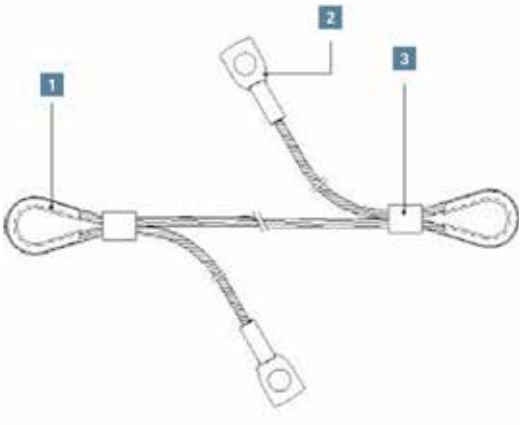
Cantilever Dropper Bucle 5.12 INOX

L.-No.	ID-Code	Description	Diameter Application (mm)	Compression die	Qty
234 025 012		Assembly			
	625.012.81	Thimble (1)	5	-	2
	TPA 05 INOX 12	Cable lug (2)	5	*	2
	OVAL 5 INOX	Compression sleeve (3)	5	*	2

*) Delivery in individual parts, hanger wire is not included
For suitable compression tools, please contac office@mosdorfer.com

Application:
- Cantilever dropper
- Registration arm dropper
- This dropper is used to connect the top tube with the registration tube
- Used for cantilevers with forged and casted components

Material:
- Compression sleeve: St. Steel (A2) (UNE- EN ISO 3506)
- Cable lug: AISI 316 (UNE-EN 10088)
- Thimble: St. Steel (A2) (UNE-EN ISO 3506)
- Cable: St. Steel 1.4401 (UNE-EN 10088)

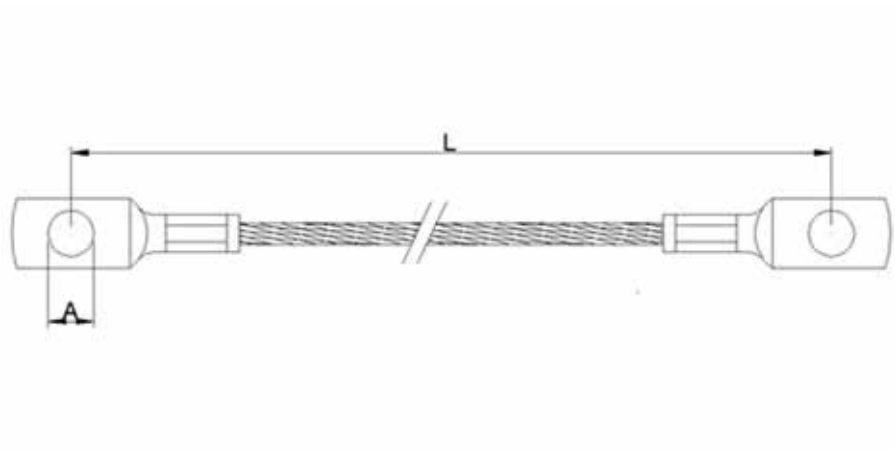


Bonding Connection

L.-No.	ID-Code	Dimensions (mm)	
		A	L
234 026 350	CONJUNTO TC 16.10.T	10,5	350

Application:
- Steady arm bonding connection
- This connection provides a bonding connection
- Used for cantilevers with forged and casted components

Material:
- Cable lug: Cu-ETP (Tinned) (UNE-EN 12165)
- Cable: Cu-ETP (Tinned) (UNE-EN 12165)



ELECTRICAL SCREW AND COMPRESSION CONNECTORS

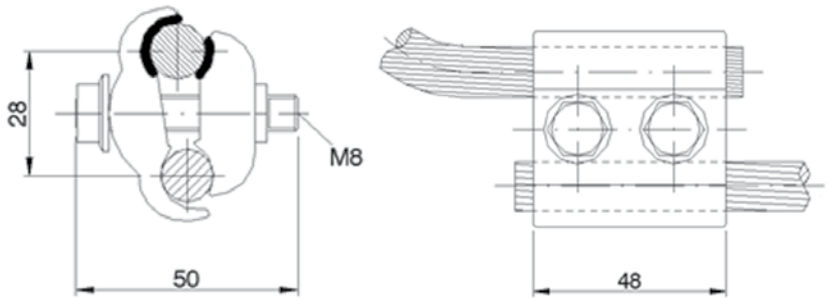
Content

Bimetallic Connection Clamp

L.-No.	Al Cable diameter (mm)	Cu cable diameter (mm)	Tightening torque (mm)
330 712 001	6,3-15,7	3,5-12,5	38

Application:
- Electrical connections
- Earthing connections
- Bimetallic Al/Cu
- This clamp is used to connect Aluminum-Steel cables with copper cables or the horn gap discharger with the messenger wire

Material:
- Casting parts: Aluminium AlSiMg0,5Mn (UNE-EN 573)
- Insert: Cu-ETP
- Screws: St. Steel (A2) (EN ISO 3506)
- Washers: St. Steel (A2) (EN ISO 3506)

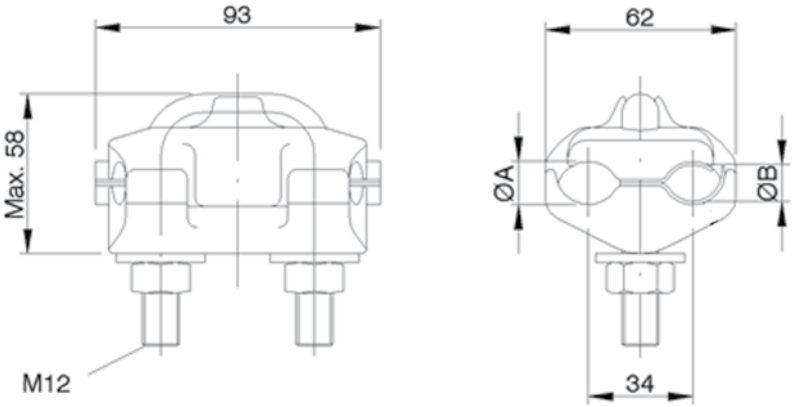


Bimetallic Connection Clamp

L.-No.	Al cable section (mm2)	Cu cable section (mm2)	Cables diameter (mm)		Tightening torque M12 (Nm)
			A	B	
332 235 235	95-280	70-185	12,5-21,8	10,5-17,5	75

Application:
- Electrical connection
- Bimetallic connection Al/Cu
- This clamp is used for fixed point and to connect aluminium cables with copper cables

Material:
- Casting parts: EN AW-6351 (UNE-EN 573)
- Nuts: St. Steel (A2) (EN ISO 3506)
- Washer: St. Steel (A2) (EN ISO 3506)
- U-bolt: St. Steel (A2) (EN ISO 3506)
- Bimetallic sheet: Cupal



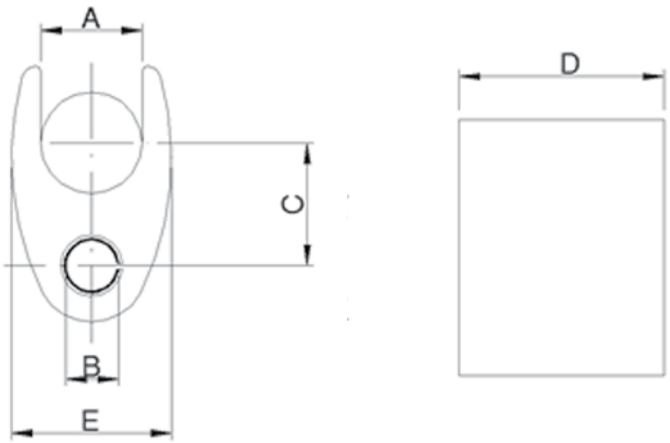
Bimetallic Compression Clamp

L.-No.	ID-Code	Copper cable cross section (mm2)	Aluminium cable cross section	Dimensions (mm)					Compression die
				A	B	C	D	E	
234 160 110	PB-50.110	50	LA-110	14,2	10	21	40	31	302 131 131 (DB3)
234 160 180	PB-50.180	50	LA-180	19,8	10	24	40	31	305 730 001
234 160 280	PB-50.280	50	LA-280	22,5	10	25,7	40	34	234 562 280
234 161 110	PB-70.110	65-70	LA-110	14,2	12	21	40	31	302 131 131 DB3
234 162 180	PB-95F.180	95 F	LA-180	19,8	16	24	40	31	305 730 001
234 162 280	PB-95F.280	95 F	LA-280	22,5	16	25,7	40	34	234 562 280
234 163 280	PB-120F.280	120F	LA-280	22,5	16	25,7	40	34	234 562 280

Suitable compression head: e.g. Size III, item no. 305 678 009
Suitable electrical hydraulic compression pump: e.g. EHP 850 bar, item no. 305 853 012 Suitable foot operated hydraulic compression pump: e.g. FP 850 bar, item no. 305 799 002

Application:
- Electrical connections
- Bimetallic connections Al/Cu
- This clamp is used to connect aluminium cables with copper cables

Material:
- Profile: Aluminium alloy (EN-AW-Al 99,55) (UNE-EN 573)
- Bimetallic sleeve: CUPAL

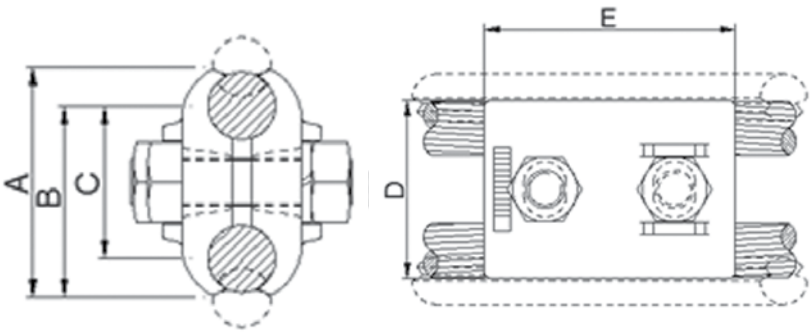


Bolted Electrical Connection Clamp

L.-No.	ID-Code	Material	Conductor	Branch cable cross section	Tightening Torque		Dimensions					
					M10	M12	A	B	C	D	E	F
234 110 000	HC.106.VM	Brass	65-120 oder AC/BC 80-150	50F-95F	38	-	48	40	32	47	66	-
234 110 001	HC.106.VM.M	Brass	65-120 oder AC/BC 80-150	50F-95F	38	-	48	40	32	47	-	32
234 110 002	HC.106VM.C	CuNi2Si	65-120 oder AC/BC 80-150	50F-95F	38	-	48	40	32	47	66	-
234 110 003	HC.106.VM.M.C	CuNi2Si	65-120 oder AC/BC 80-150	50F-95F	38	-	48	40	32	47	-	32
234 110 004	HC.107.1.VM	Brass	95-150 oder AC/BC 80-150	50F-95F	-	65	52	42	33	51	-	37
234 110 005	HC.107.VM	Brass	95-150 oder AC/BC 80-150	50F-95F	-	65	52	42	33	53	75	-
234 110 006	HC.107.1.VM.C	CuNi2Si	95-150 oder AC/BC 80-150	50F-95F	-	65	52	42	33	51	-	37
234 110 007	HC.107.VM.C	CuNi2Si	95-150 oder AC/BC 80-150	50F-95F	-	65	52	42	33	53	75	-

Application:
- Jumpers
- Electrical connections
- This clamp is used to provide a full current connection

Material:
- Forged parts: See table below
- Screws: St. Steel (A2-70) (EN ISO 3506)
- Washer: St. Steel (A2) (EN ISO 3506)
- Nuts: St. Steel (A2-70) (EN ISO 3506)

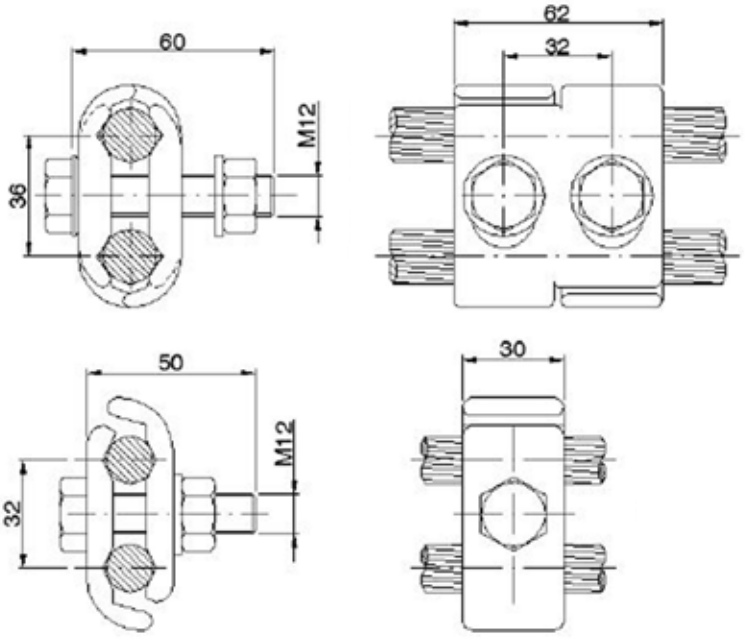


Bolted Connection Clamp

L.-No.	ID-Code	Material	Main cable cross section (mm2)	Branch cable cross section (mm2)	Tightening torque (Nm)
234 111 000	HLT 10-22 V	Brass	35-300	35-300	65
234 111 001	HLT 10-22 VM	Brass	35-150	35-150	65
234 111 002	HLT 10-22 V.C	CuNi2Si	35-300	35-300	65
234 111 003	HLT 10-22 VM.C	CuNi2Si	35-150	35-150	65

Application:
- Electric bridge
- Electrical connections
- This clamp is used to connect two copper cables

Material:
- Forged parts: See table below
- Screws: St. Steel (A2-70) (EN ISO 3506)
- Washer: St. Steel (A2) (EN ISO 3506)
- Nuts: St. Steel (A2-70) (EN ISO 3506)

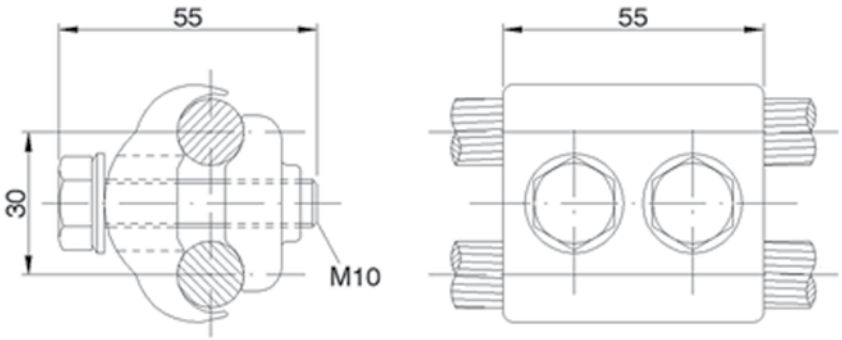


Bolted Connection Clamp Al

L.-No.	ID-Code	Cable cross section (mm2)	Cables Diameters	Tightening torque M10 (Nm)
330 869 869	-	25-150	6,3-15,7	38

Application:
- Electrical connections
- Earthing connections
- This clamp is used to connect two aluminium cables or the horn gap discharger with earthing cable

Material:
- Casting parts: Aluminium AlSiMg0,5Mn (UNE-EN 573)
- Screws: St. Steel (A2) (EN ISO 3506)
- Washers: St. Steel (A2) (EN ISO 3506)

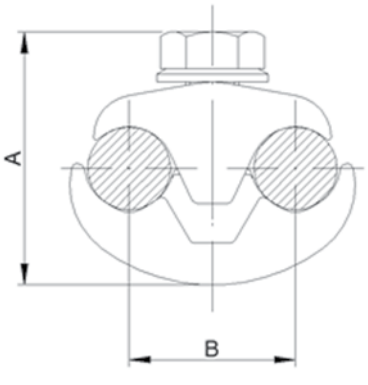


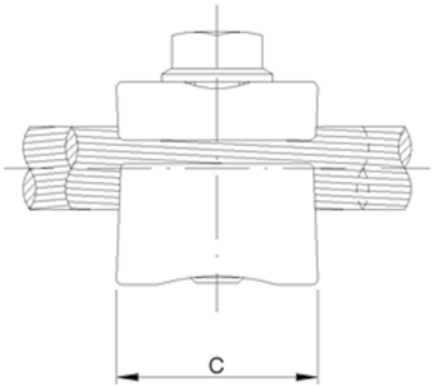
Bolted Connection Clamp Al

L.-No.	ID-Code	Main cable cross section	Branch cable cross section	Dimension			Bolts	Tightening torque (Nm)
				A	B	C		
234 121 020	EGT 20	25-70	25-56	31	20,5	30	M8	20
234 121 021	EGT 21	25-95	95-150	40	31,5	38	M10	30
234 121 022	EGT 22	70-150	70-150	48	31,5	38	M10	30
234 121 024	EGT 24	95-240	50-240	58	36	45	M12	60

Application:
- Electrical connections
- This clamp is used to connect two aluminium cables

Material:
- Casting parts: AC 47100 (UNE-EN 1706)
- Screw: St. Steel (A2-70) (EN ISO 3506)
- Washer: St. Steel (A2) (EN ISO 3506)
- Nut: St. Steel (A2-70) (EN ISO 3506)





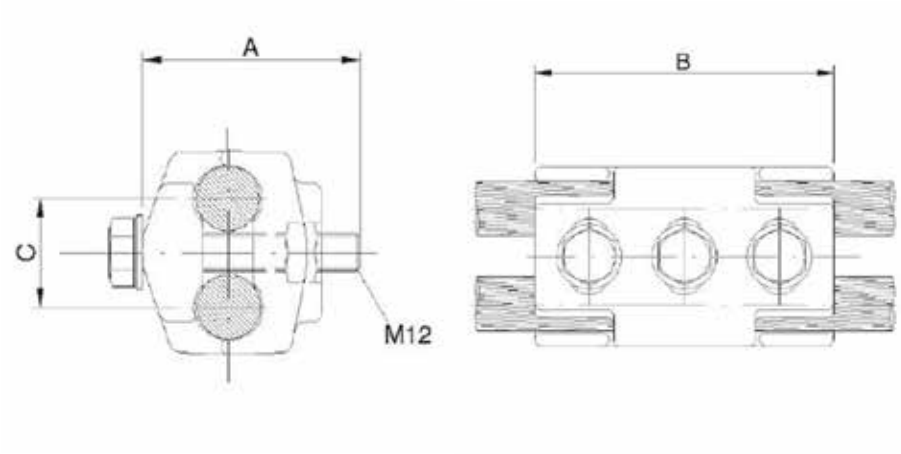
Bolted Connection Clamp

L.-No.	ID-Code	Material	Bolts	Main cable cross section	Branch cable cross section	Dimensions			Tightening torque (Nm)
						A	B	C	
234 131 001	PTA 25.56	AC 47100	2	25-56	25-56	37,5	80	25	38*
234 131 002	PTA 35.200	AC 47100	3	35-200	35-200	72	110	35	65
234 131 003	PTA 35.300	AC 42200	3	35-300	35-300	72	110	40	65
234 131 004	PTA 50.150	AC 47100	2	50-150	50-150	47	80	34	65
234 131 005	PTA 193.377	AC 42200	3	193-377	193-377	85	150	46	65

*) M10 instead of M12

Application:
- This clamp is used to connect two aluminium cables

Material:
- Casting parts: Aluminium alloy (UNE-EN 1706)
- Screw: St. Steel (A2-70) (EN ISO 3506)
- Washer: St. Steel (A2) (EN ISO 3506)
- Nut: St. Steel (A2-70) (EN ISO 3506)



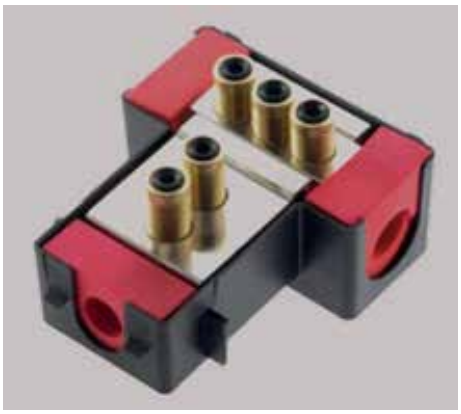
RSC-T Tap-Off Earthing Connector

For insulated power cables (IPC)

L.-No.	Product description	Main Conductor		Branch Conductor	
		External Diameter	Cross Section	External Diameter	Cross Section
332 846 001	RSC-T tap-off connector	19-21,5	240	15-16,5	120 - 150

Using insulation piercing technology, main and tap cables are installed without having to strip the insulation. The compression of grounding and tap cables that was previously used, as well as the restoration of the insulation with a heatshrink sleeve, is no longer necessary. The plastic enclosure with its seals guarantees electric shock protection in accordance with IP1X.

The RSC-T ground tap connector comprises several parts and can be mounted directly onto an existing system. The ground cable is laid in place without any preparatory work and enclosed by the connector using a locking bolt. The SICON piercing bolts penetrate the insulation to establish safe and reliable contact with the ground conductor. Any possible damage to the metallic conductor is avoided by means of the proven SICON technology. The patented shear bolt has a stepless construction and utilizes the full load capacity of the thread at all times. The friction disc at the end of the bolt prevents the metal conductor from being damaged. For the RSC-T, the proven SICON bolt has been further developed and equipped with a friction disc which features insulationpiercing contact geometry. This establishes a reliable contact with optimum contact force. As usual, the SICON bolt is installed using a standard



Application:
- Earthing connections without stripping insulated cables.
- NR PADS approval number PA05/06096

Advantages:
- Easy assembly without stripping the cable insulation
- Reduced installation time
- No special tool required
- No cutting of main conductor necessary
- Tested according IEC 61284:1997-09 (Class B)
- Cover protects against accidental contact, dust and moisture
- Consistent and reliable connection due to shear bolt technology

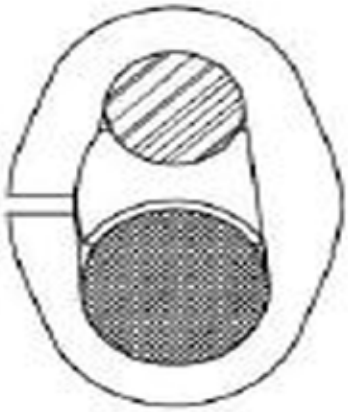
Compression Terminals (C-Clamps)

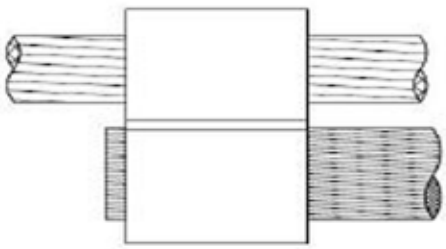
For wires up to 150 mm² cross section

L.-No.	Main cable cross section	Branch cable cross section	Appropriate die for compressing	Appropriate die for removing	Remark
302 776 354	50	35F/50	302 131 131	302 246 246	Ebs 10.21.14 – d
302 776 355	50	95F/120	302 131 131	302 246 246	Ebs 10.21.14 – c
302 776 776	50	70F/95	302 131 131	302 246 246	Ebs 10.21.14 – e
302 776 909	70	70F/95	302 131 131	302 246 246	Ebs 10.21.14 – f
302 777 777	50	120F	302 131 131	302 246 246	Ebs 10.21.14 – g
302 827 827	150	50	305 730 001	305 729 001	
303 028 028	120F	70F/95	302 131 131	302 246 246	Ebs 10.21.14 – i
303 120 120	120	120F/150	305 730 001	305 729 001	Ebs 10.21.14 – n
303 132 132	150	120F/150	305 730 001	305 729 001	
303 134 001	50	120F/150	302 131 131	302 246 246	
303 398 397	95	95	305 730 001	305 729 001	
303 404 404	95/70F	50/40 Staku	305 730 001	305 729 001	ÖBB, SBB
303 405 405	95/92 Staku	95/92 Staku	305 730 001	305 729 001	ÖBB, SBB
304 331 331	150	95/92 Staku	305 730 001	305 729 001	
304 594 840	50/70 Staku	25F/35	305 730 001	305 729 001	
304 800 003	70	95F/120	302 131 131	302 246 246	Ebs 10.21.14 – l
304 800 004	70	70	302 131 131	302 246 246	Ebs 10.21.14 – m
304 800 438	70F/95	70F/95	302 131 131	302 246 246	Ebs 10.21.14 – b
304 800 800	70	35F/50	302 131 131	302 246 246	Ebs 10.21.14 – k
304 800 906	95F/120	95F/120	302 131 131	302 246 246	Ebs 10.21.14 – a
304 800 910	70F/95	95F/120	302 131 131	302 246 246	Ebs 10.21.14 – h
304 993 135	50	120F	305 730 001	305 729 001	
304 993 139	Cut 70/50	95F/120	305 730 001	305 729 001	

Application:
- Jumper
- Electrical connection Cu/Cu, Cu/Bz, Bz/Bz

Material:
- Clamp parts: Cu-ETP (EN 12165)





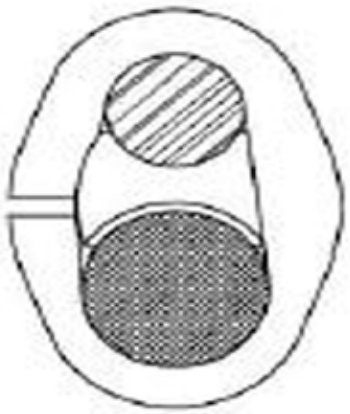
Compression Terminals (C-Clamps)

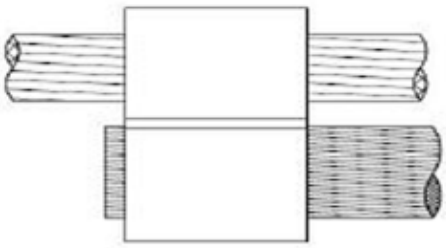
For wires over 150 mm² cross section

L.-No.	ID-Code	Main cable cross section	Branch cable cross section	Appropriate die for compressing	Appropriate die for removing
303 300 001	GC-95F-225	225	95 F	305 730 001	305 729 001
303 300 002	GC-125F-153	153	125F	305 730 001	305 729 001
303 300 003	GC-125F-225	225	125F	305 730 001	305 729 001
303 300 004	GC-100-225	225	100	305 730 001	305 729 001
303 300 005	GC-150-225	225	150	305 730 001	305 729 001
303 300 006	303.225.95	225	95	305 730 001	305 729 001

Application:
- Jumper
- Electrical connection Cu/Cu, Cu/Bz, Bz/Bz
- The compression branch terminals for current carrying cable connections of Cu or Bz wires with the same or different cross sections
- They are installed hydraulically with compression tools

Material:
- Clamp parts: Cu-ETP (EN 12165)



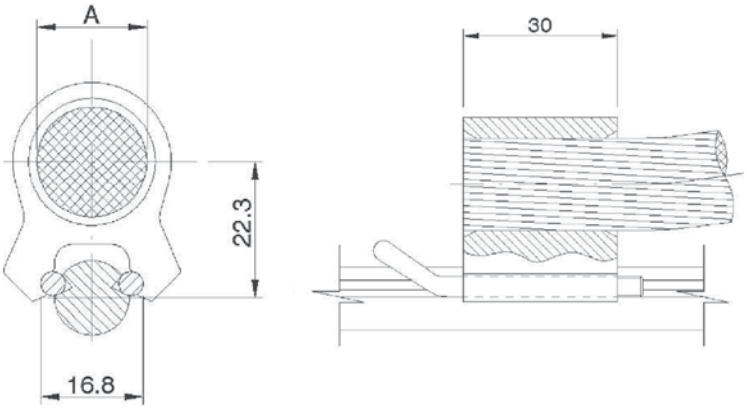


Compression Feeder Terminals (E-Clamps)

L.-No.	ID-Code	Contact Wire	Branch cable cross section	Comp. force	Dimension A	Compression die	Removing die	Remark
302 381 003		AC 80-120	70F	240	11,5	302 131 131	302 246 246	
302 381 380		AC 80-120	35F	240	9,6	302 131 131	302 246 246	Ebs 10.21.11-c
302 381 381		AC 80-120	95 F	240	15,5	302 131 131	302 246 246	Ebs 10.21.11-a
302 381 698		AC 80-120	70F	240	11,5	302 131 131	302 246 246	Ebs 10.21.11-b
303 802 802		BC 107	95	240	13,5	305 802 001	305 803 001	SBB
303 802 325		BC 150	95	240	13,5	305 802 001	305 803 001	SBB
303 802 330		BC 107	150	240	16,5	305 802 001	305 803 001	SBB
303 802 329		BC 150	150	240	16,5	305 802 001	305 803 001	SBB
304 202 006		BC 80-100	95 F	240	14,4	305 802 001	305 803 001	
304 839 001		BC 80-100	95F/120	240	15,0	305 802 001	305 803 001	
304 839 839		BC 80-100	120F	240	17,5	305 802 001	305 803 001	
303 305 001	GC-95F-HC	BC 107-150	95 F	240	15,0	305 802 001	305 803 001	
303 305 002	GC-120F-HC	BC 107-150	120F	240	17,0	305 802 001	305 803 001	
303 305 003	GC-150F-HC	BC 107-150	150F	240	18,0	305 802 001	305 803 001	

Application:
- Jumper
- Electrical feeder connection

Material:
- Clamp part: Cu-ETP (EN 12165)
- Clip: Bz



CLAMPS

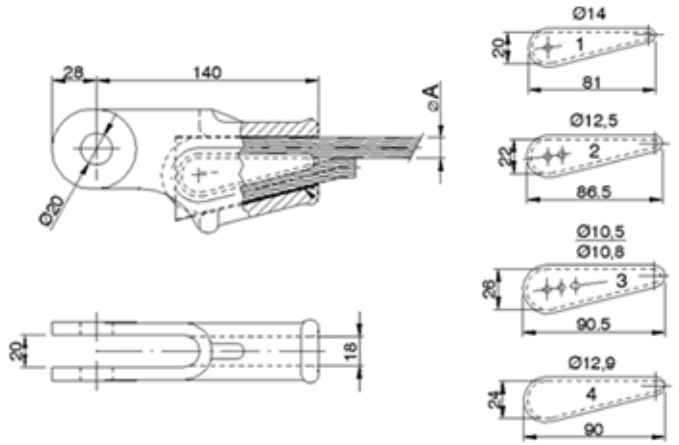
Content

Wedge-Shaped End Terminal

L.-No.	ID-Code	Wedge	Wire Diameter ØA (mm)	Application	Weight (kg)
234 150 014	GA 10 CH 1	1	14	Messenger Wire Cu 120 mm2	0,60
234 150 107	GA 10 CH 2	2	12,5	Messenger Wire Cu 95 mm2/ Contact Wire Cu 107 mm2	0,63
234 150 065	GA 10 CH 3	3	10,5 - 10,8	Messenger Wire Cu 70 mm2/ Contact Wire Cu 85 mm2	0,70
234 150 120	GA 10 CH 4	4	12,9	Contact Wire Cu 120 mm2	0,68

Application:
- Contact wire anchoring clamp
- Messenger wire anchoring clamp

Material:
- Casting part: Aluminium EN AC-43000 (Al2560-T6) (UNE-EN 1706 CC491 K- GS S/UNE-EN 1982)
- Wedge: Bronze
- Bimetallic sleeve

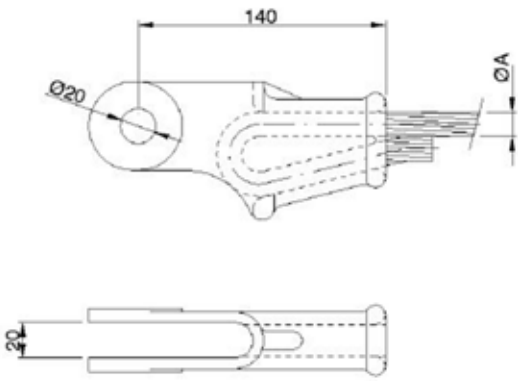


Wedge-Shaped End Terminal

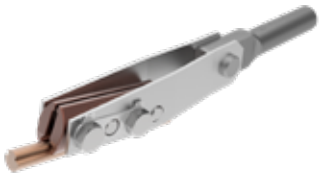
L.-No.	ID-Code	Wire Diameter ØA (mm)	Weight (kg)
234 151 001	GA 10.8	8 - 12	0,47
234 151 002	GA 10.12	12	0,47
234 151 003	GA 10.13	13 - 15,5	0,47

Application:
- Tensioning of steel wires
- This part is used for the tension-proof tensioning of steel wires

Material:
- Casting part: Aluminium EN AC-43000 (Al2560-T6) S/UNE-EN 1706 CC491 K-GS S/UNE-EN 1982
- Wedge: Aluminium EN AC-43000 (Al2560-T6) S/UNE-EN 1706 CC491 K- GS S/UNE-EN 1982



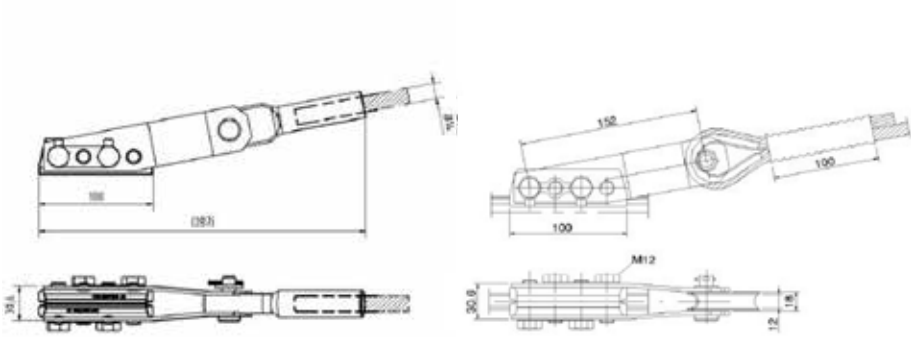
Terminal Clamp for Z-Wire



L.-No.	ID-Code	Clevis pin (mm)	Contact wire section	Tightening torque M12 (Nm)	Wire section (mm2)	Max. working load (kN)
750 502 000	75.05.02A	12	AC/BC 80 - 150	75	65 - 70	17,5
000 701 314	000.701.314-00	12	AC/BC 80 - 150	100	120	27,5

Application:
- Z-Wire
- Midpoint
- This clamp is used for contact wire anchorage in Z-Wire for midpoint

Material:
- Contact wire splice: CuNi2Si
- Plates: X5CrNi18-10
- Screws: St. Steel (A4-80)
- Washers: St. Steel (A2)
- Clevis pin: X5CrNi18-10
- Split pin: St. Steel (A2-70)
- 3-Hole washer: X5CrNi18-10
- Rope fitting Ø14: X5CrNi18-11

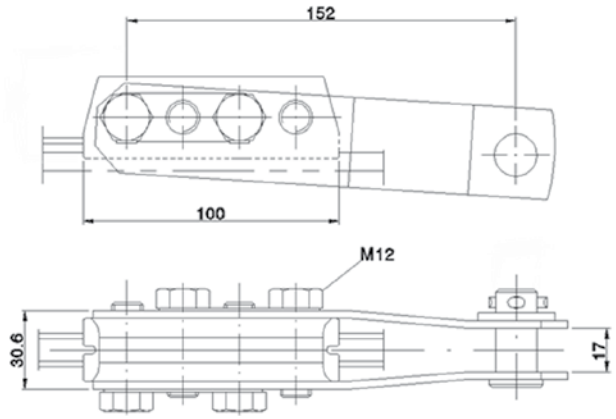


Terminal Clamp for Contact Wire

L.-No.	ID-Code	Clevis pin (mm)	Contact wire section	Tightening Torque M12 (Nm)
750 503 000	75.05.03A	16	AC/BC 80 - 150	75

Application:
- This clamp is used for contact wire anchorage

Material:
- Forged parts: CuNi2Si (EN12165)
- Plates: X5CrNi18-10 (EN 10088)
- Screws: St. Steel (A2-80) (EN 3506)
- Washers: St. Steel (A2)
- Nuts: St. Steel (A2-80) (EN 3506)
- Clevis pin: St. Steel (A2) (EN 3506)
- Split pin: St. Steel (A2) (EN 3506)
- 3-Hole washer: X5CrNi18-10 (EN 10088)

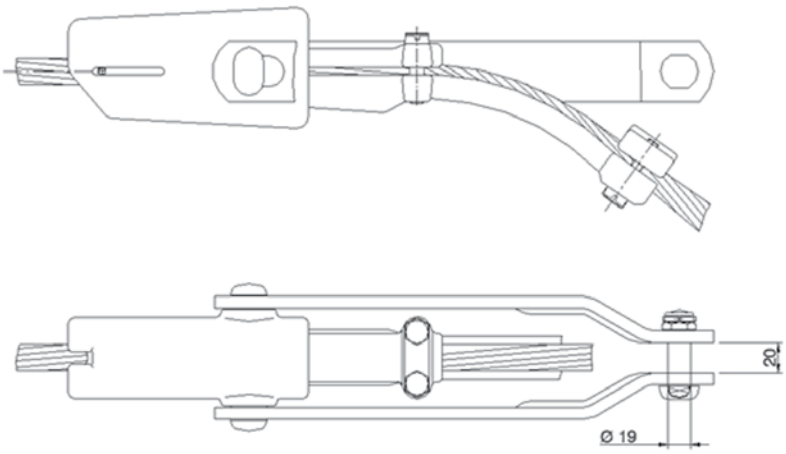


Duo Wedge Terminal Clamp

L.-No.	Fishplate	Conductor range (mm)	Wire cross section (mm2)	Nominal. Load SMFL (kN)	Weight (kg)
439 171 004	Steel, HDG	20,1 – 22,5	240 - 300	100	4,0
439 171 006	Aluminium	20,1 – 22,5	240 - 300	40	3,92
437 582 001	Aluminium	16,0 – 18,0	153 - 193	50	-
437 582 002	Aluminium	14,0 – 15,9	110 - 150	50	-

Application:
- Anchorage clamp for Al and Al/St wires
- These clamps are used to strain all types of feeder and lines feeders in all overhead line constructions

Material:
- Clamp parts: AlMgSi1
- Screws: St. Steel (A2) (UNE- EN ISO 3506)
- Nuts: St. Steel (A2) (UNE- EN ISO 3506)
- Washers: St. Steel (A2) (UNE- EN ISO 3506)
- Split pin: Cu-ETP

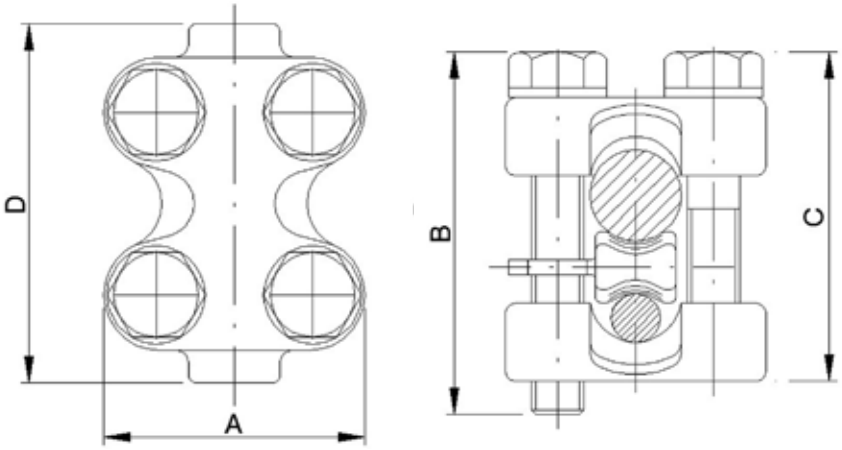


Connection Clamp

L.-No.	ID-Code	Main wire cross section	Branch wire cross section (mm2)	Dimensions A	B	C	D	Tightening torque (Nm)	Weight (kg)	Remark
332 321 003	KP 25/70	25 - 70	25 - 70	40	50	45	55	20	0,362	Ebs 07.42.42-1
332 321 005	KP 35/120	25 - 95	25 - 95	42	50	45	55	20	0,380	
332 321 007	KP 35/120X	70 - 120	70 - 120	42	55	50	55	20	0,420	
332 321 006	KP 70/150	70 - 150	70 - 150	50	77	67	80	35	0,770	

Application:
- Messenger wire anchor wire (Z-wire)
- Fixed point
- Stitch wire
- This clamp is used for high mechanical load applications providing a full current connection

Material:
- Forged parts: CuNi2Si (CW111C) (EN 12165)
- Screws: St. Steel (A2-70) (EN ISO 3506)
- Nuts: St. Steel (A2-70) (EN ISO 3506)
- Washers: St. Steel (A2) (EN ISO 3506)

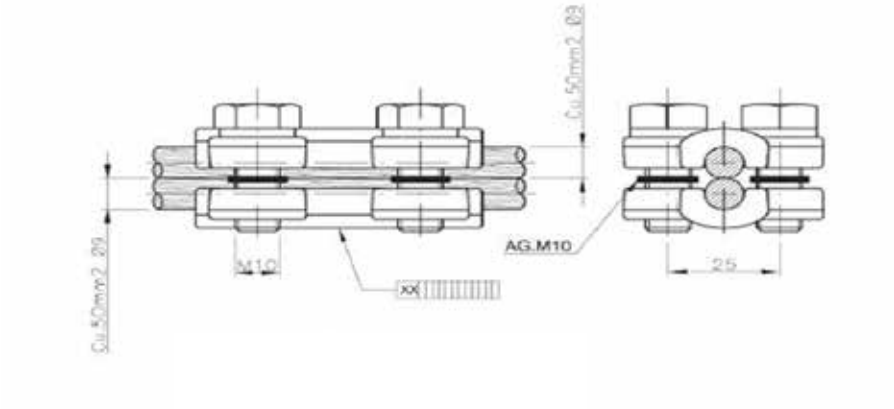


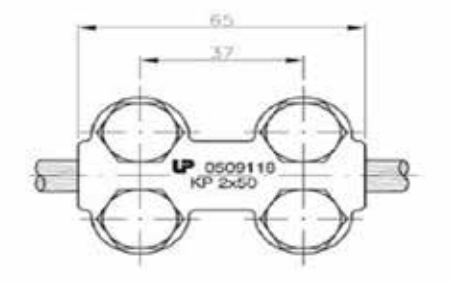
Dead End Clamp

L.-No.	ID-Code	Wire cross sections	Wire diam-eters	Tightening torque (Nm)	Weight (kg)	Remark
332 322 001	KP 2x50	50	9,0	38	0,394	Ebs 20.02.04-2

Application:
- Dead end clamp for two BZ II 50/7 wires
- This clamp is used for high mechanical load applications providing a full current connection

Material:
- Forged parts: CuNi2Si
- Screws: M10x30 Stainles Steel (A2-70)
- Washers: Stainless Steel (A2)



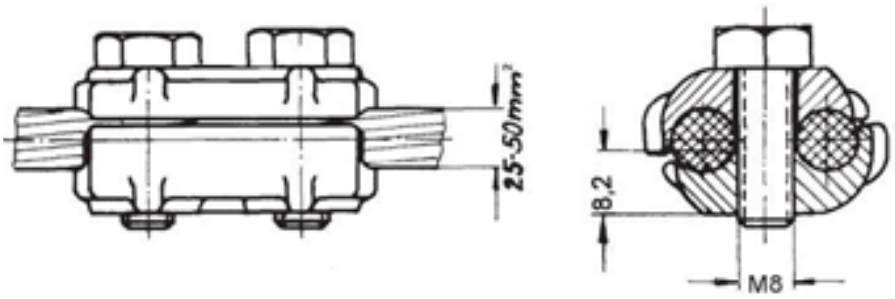


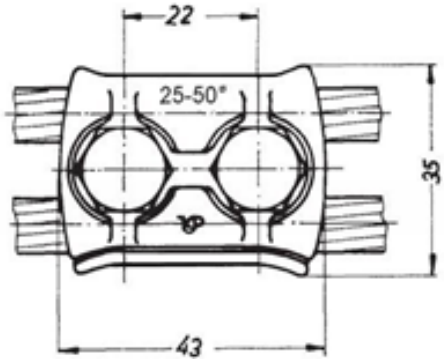
Dead End Clamp

L.-No.	ID-Code	Conductor cross sections (mm2)	Conductor diameters (mm)	Dimension B (mm)	Dimension L (mm)
330 622 622	25 - 50	6,3 - 9,0	35	43	0,394

Application:
- Electrical connection of copper wires
- This clamp is used for connecting copper wires providing a full current connection

Material:
- Forged parts: CuNiSi
- Screws: M8 bronze



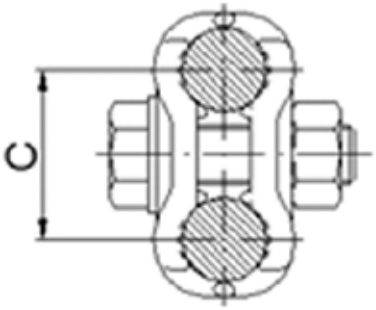


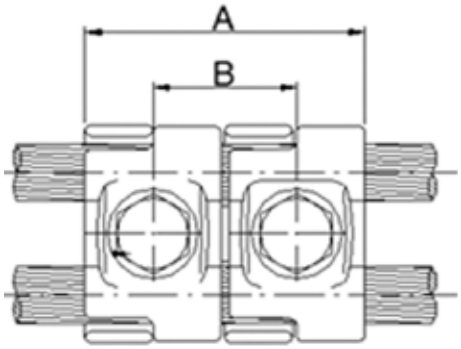
Connection Clamp Messenger Wire/Z-Wire

L.-No.	ID-Code	Main wire cross section (mm2)	Branch wire cross section (mm2)	Dimensions A	B	C	D	Tightening torque M12 (Nm)
325 102 001	GPF2-70/150	65 - 150F	65 - 150F	70	36	33	-	65
332 102 004	GPF2-70/150 M	65 - 150F	65 - 150F	-	-	33	30	65
332 321 007	KP 35/120X	70 - 120	70 - 120	42	55	50	55	20
332 321 006	KP 70/150	70 - 150	70 - 150	50	77	67	80	35

Application:
- Wires connection
- Z-Wire
- Midpoint
- This clamp is used to anchor the Z-Wire to the messenger wire for midpoint

Material:
- Forged parts: CuNi2Si (CW111C) (EN 12165)
- Screws: St. Steel (A2) (EN ISO 3506)
- Nuts: St. Steel (A2) (EN ISO 3506)
- Washer: St. Steel (A2) (EN ISO 3506)



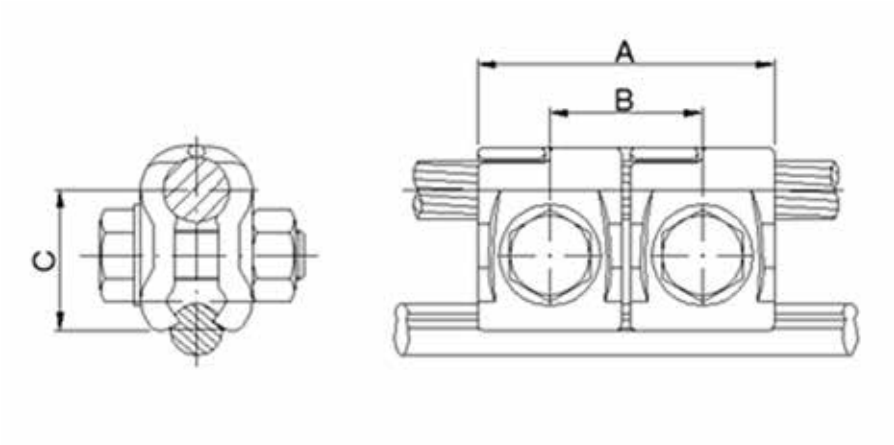


Connection Clamp Conntact Wire/Messenger Wire

L.-No.	ID-Code	Contact wire	Branch wire cross section (mm2)	Dimensions A	B	C	D	Tightening torque M12 (Nm)
332 330 001	GPF-50/95 M	AC/BC 80 - 150	Cu 50 - 95F	-	-	27,3	30	38 *
332 330 120	GPF-70/120	AC/BC 80 - 150	Cu 70 - 120	70	36	33,4	-	65
325 102 005	GPF-70/120 M	AC/BC 80 - 150	Cu 70 - 120	-	-	33,4	34	65
325 102 002	GPF-70/150	AC/BC 80 - 150	Cu 70 - 150F	70	36	31,5	-	65
325 102 003	GPF-70/150 M	AC/BC 80 - 150	Cu 70 - 150F	-	-	31,5	34	65

Application:
- Contact wire with anchor wire (Z-wire)

Material:
- Forged parts: CuNi2Si (CW111C) (EN 12165)
- Screws: St. Steel (A2) (EN ISO 3506)
- Nuts: St. Steel (A2) (EN ISO 3506)
- Washer: St. Steel (A2) (EN ISO 3506)

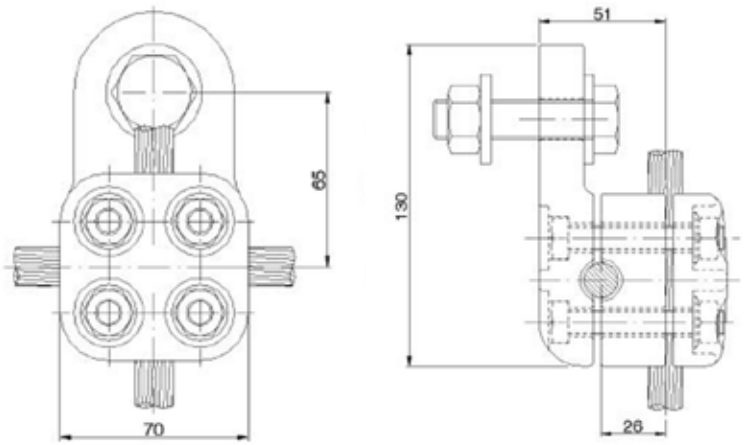


Cross Clamp

L.-No.	ID-Code	Earthing Wire	Wire diameter (mm)	Tightening torque		Weight (kg)
				M10	M16	
234 141 001	SXHAT.149	LA-110	14	38	130	1,300

Application:
- Suspension earthing wire
- This clamp is used to connect aluminium earthing wires

Material:
- Clamp: Aluminum alloy EN-AC 42200(UNE-EN 1706)
- Screws: St. Steel (A2-70) (EN ISO 3506)
- Nuts: St. Steel (A2-70) (EN ISO 3506)
- Washer: St. Steel (A2) (EN ISO 3506)

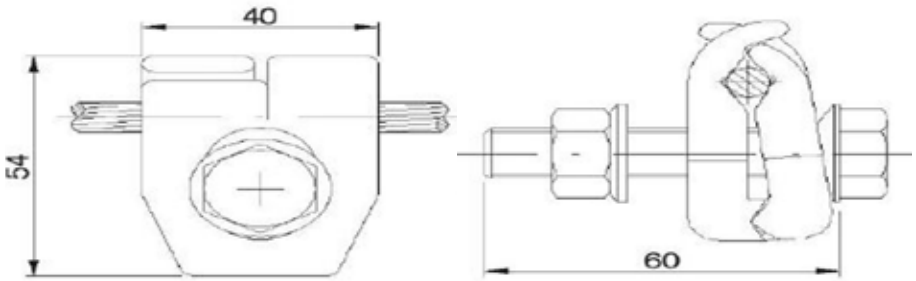


Suspension Clamp

L.-No.	ID-Code	Wire cross section (mm2)	Wire diameter (mm)	Tightening torque M12 (Nm)	Weight (kg)
234 145 001	HLT 119 V1 C	35-300	7,5 - 22,5	65	-

Application:
- Suspension feeder wire
- This clamp is used to hang copper wires on poles

Material:
- Forged part: CuNi2Si (UNE-EN 12165)
- Screw: St. Steel (A2-70) (EN ISO 3506)
- Nut: St. Steel (A2-70) (EN ISO 3506)
- Washers: St. Steel (A2) (EN ISO 3506)

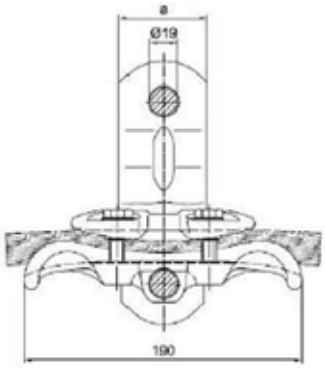


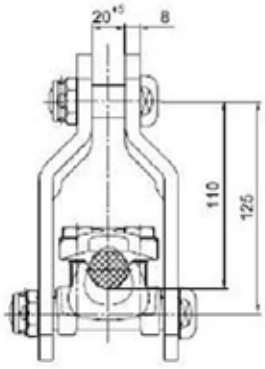
Swivelling Suspension Clamp

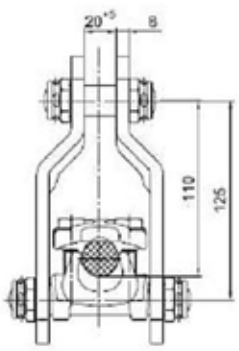
L.-No.	ID-Code	Earthing wire acc. DIN EN 50182	Wire diameter (mm)	Tightening torque (Nm)	Dimen-sion a (mm)	Remark
438 618 002	Steel, hdg	243-AL1, 184-AL1/30-St1A	17,6 - 22,5	44	60	Ebs 16.03.04-1 a
438 618 006	Aluminium	243-AL1, 184-AL1/30-St1A	17,6 - 22,5	44	50	Ebs 16.03.04-1 c
438 591 001	Not Included	243-AL1, 184-AL1/30-St1A	17,6 - 22,5	44	-	Ebs 16.03.04-1 c1

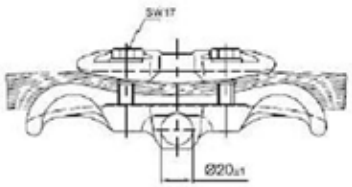
Application:
- Suspension of earthing wires or return wires
- This clamp type is used to hang or support aluminium wires

Material:
- Clamp body: Aluminium alloy
- Fishplates: see table







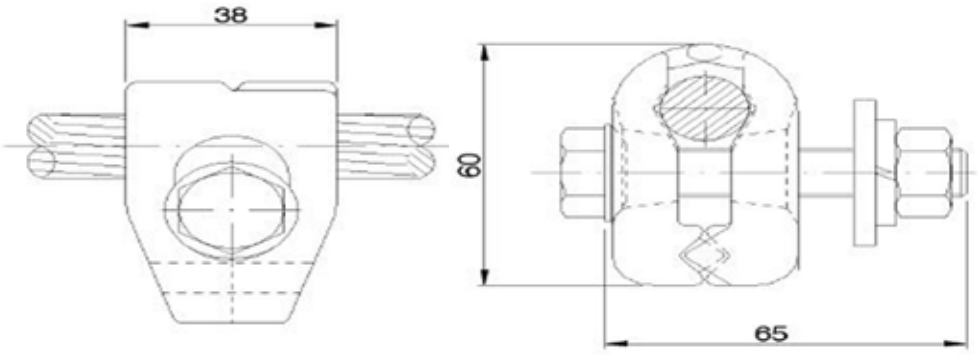


Suspension Clamp

L.-No.	ID-Code	Earthing Wire	Wire diameter (mm)	Tightening torque M12 (Nm)	Weight (kg)
234 145 010	GTLA.11.21	LA-110 – LA-280	14 - 21	65	0,250

Application:
- This clamp is used to hang the aluminium earthing wires on poles

Material:
- Casting part: Aluminium alloy EN-AC 43000 (UNE-EN 1706)
- Screw: St. Steel (A2-70) (EN ISO 3506)
- Nut: St. Steel (A2-70) (EN ISO 3506)
- Washers: St. Steel (A2) (EN ISO 3506)

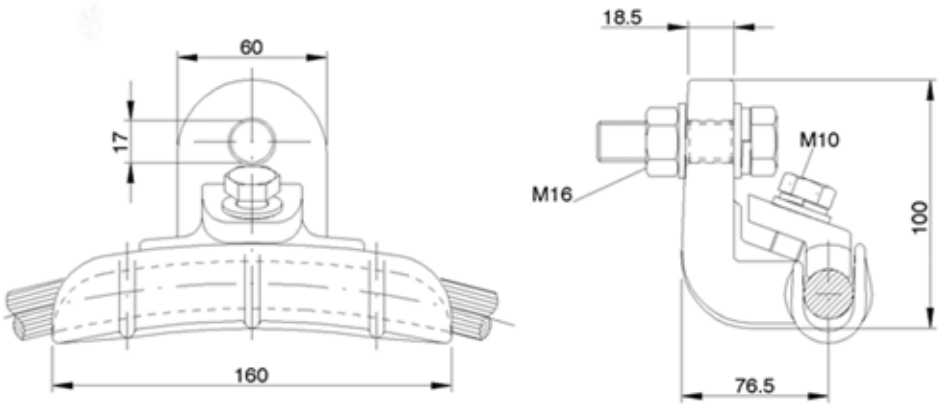


Suspension Clamp

L.-No.	ID-Code	Screw/Nut for pole	Earthing Wire	Wire diam-eter (mm)	Tightening torque M12 (Nm)		Weight (kg)
					M12	M16	
244 340 322	GSLA 11-21 C	Included	LA-110/180/230	14 - 20,3	65	130	0,860
244 340 323	GSLA 11-21 C ST	Not Included	LA-110/180/230	14 - 20,6	65	130	0,860

Application:
- This clamp is used to hang aluminium earthing wires

Material:
- Clamp: Aluminum alloy EN-AC 42200(UNE-EN 1706)
- Screws: St. Steel (A2-70) (EN ISO 3506)
- Nuts: St. Steel (A2-70) (EN ISO 3506)
- Washers: St. Steel (A2) (EN ISO 3506)

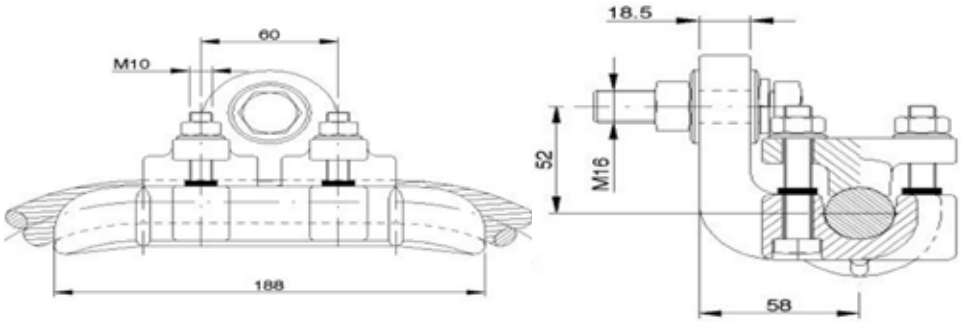


Suspension Clamp

L.-No.	ID-Code	Screw/Nut for pole	Earthing Wire	Wire diameter (mm)	Tightening torque M12 (Nm)		Weight (kg)
					M12	M16	
244 340 320	GSLA 11-21 C V1	Included	LA-110/180/280/380	14 - 25,5	38	130	1,350
244 340 321	GSLA 11-21 C V1 ST	Not Included	LA-110/180/280/380	14 - 25,5	38	130	1,350

Application:
- This clamp is used to hang aluminium earthing wires

Material:
- Casting part: Aluminium alloy EN-AC 43000 (UNE-EN 1706)
- Screws: St. Steel (A2-70) (EN ISO 3506)
- Nuts: St. Steel (A2-70) (EN ISO 3506)
- Washer: St. Steel (A2) (EN ISO 3506)

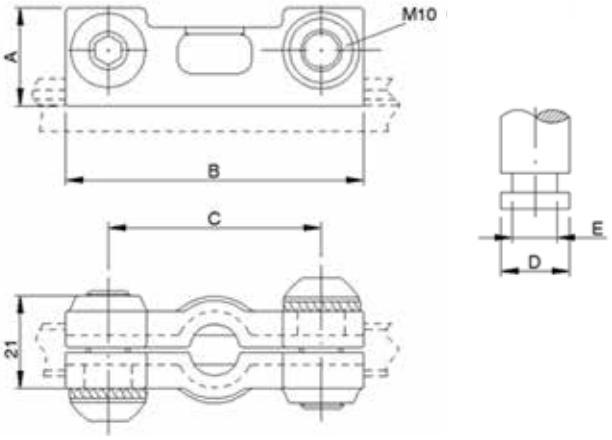


Contact Wire Clip

L.-No.	ID-Code	Screw	Contact wire	Dimensions					Tightening Torque M10	Weight (kg)
				A	B	C	D	E		
304 741 001	G1T	Allen	AC/BC 80 - 150	23,5	75	53	23,7	15,7	38	0,21
304 742 001	G1TA	Allen	AC/BC 80 - 150	23	70	50	16	10,5	38	0,18
304 741 002	G1T CH	Hexagonal	AC/BC 80 - 150	23,5	75	53	23,7	15,7	38	0,22
304 742 002	G1TA CH	Hexagonal	AC/BC 80 - 150	23	70	50	16	10,5	38	0,19

Application:
- This clip is used to connect the steady arm or clamp holder with the contact wire so that it can rotate
- Used for cantilevers with forged and casted components

Material:
- Forged parts: CuNi2Si (UNE-EN 12165)
- Washer: St. Steel (A2) (UNE- EN ISO 3506)
- Screw: St. Steel (A2-80) (UNE-EN ISO 3506-1)

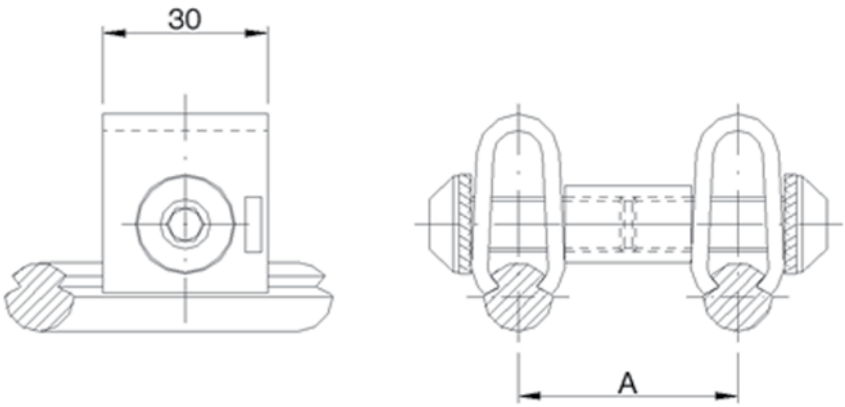


Contact Wire Spacer

L.-No.	ID-Code	Contact wire	Dimensions (mm)	Tightening Torque M10 (Nm)
234 112 035	GS 35	AC/BC 80 - 150	35	25
234 112 040	GS 40	AC/BC 80 - 150	40	25
234 112 050	GS 50	AC/BC 80 - 150	50	25
234 112 170	GS 170	AC/BC 80 - 150	170	25
234 112 200	GS 200	AC/BC 80 - 150	200	25

Application:
- The contact wire spacer keeps two contact wires at a constant distance from one another

Material:
- Forged parts: CuNi2Si
- Spacer: St. Steel (A2) (EN ISO 3506)
- Screws: St. Steel (A2) (EN ISO 3506)
- Washers: St. Steel (A2) (EN ISO 3506)

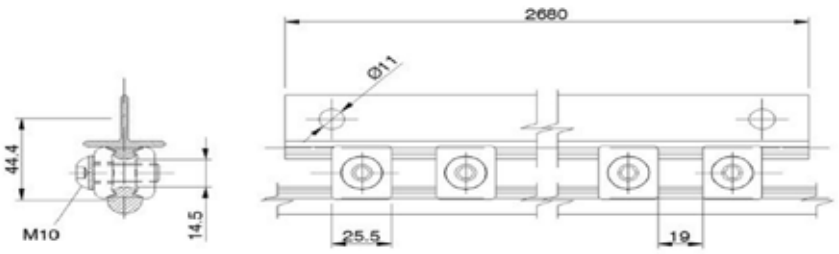


Contact Wire Crossing

L.-No.	ID-Code	Contact wire	Tightening Torque M10 (Nm)
234 160 001	ASM.AGU-01	AC/BC 80 - 150	25

Application:
- This part is used for crossing of contact wires

Material:
- Forged clamps: CuNi2Si
- Crossing profile: Cu-ETP
- Screws: St. Steel (A2-70) (EN ISO 3506)
- Washers: St. Steel (A2-70) (EN ISO 3506)

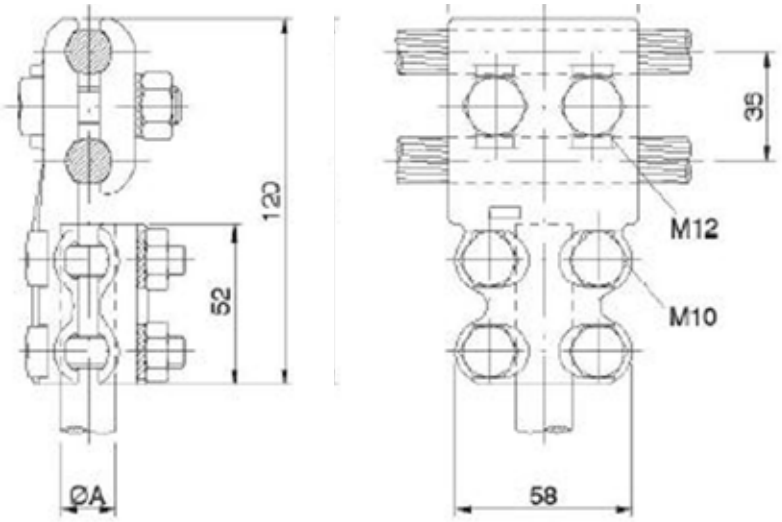


Earthing Clamp to main Electrode

L.-No.	ID-Code	Branch wire cross section (mm2)	Diameter (mm)	Tightening Torque (mm)	
				M10	M12
234 180 001	TCT5.120x2.18	95 - 185	18	38	65
234 180 002	TCT5.120x2.24	95 - 185	24	38	65

Application:
- This clip is used to connect the main electrode with the other earthing electrodes

Material:
- Casting parts : Cu alloy CC491 K-GS (UNE-EN 1982)
- Screws: St. Steel (A2) (EN ISO 3506)
- Nuts: St. Steel (A2) (EN ISO 3506)
- Washers: St. Steel (A2) (EN ISO 3506)

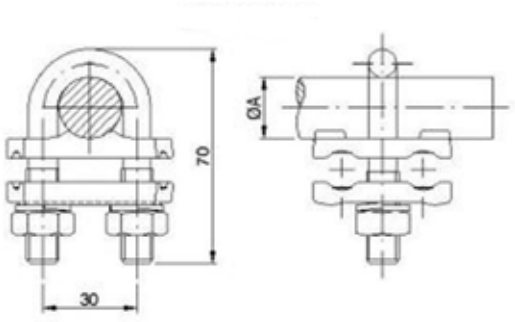


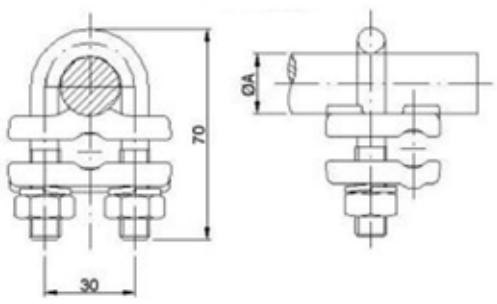
Vertical/Horizontal Earthing Clamp to Electrode

L.-No.	ID-Code	Description	Branch wire cross section(mm)	Diameter Ø A (mm)	Tightening Torque M10 (Nm)
234 181 001	GPP.2014	Horizontal connection clamp	35 - 120	16 - 20	38
234 181 002	GPX.2014	Vertical connection clamp	35 - 120	16 - 20	38

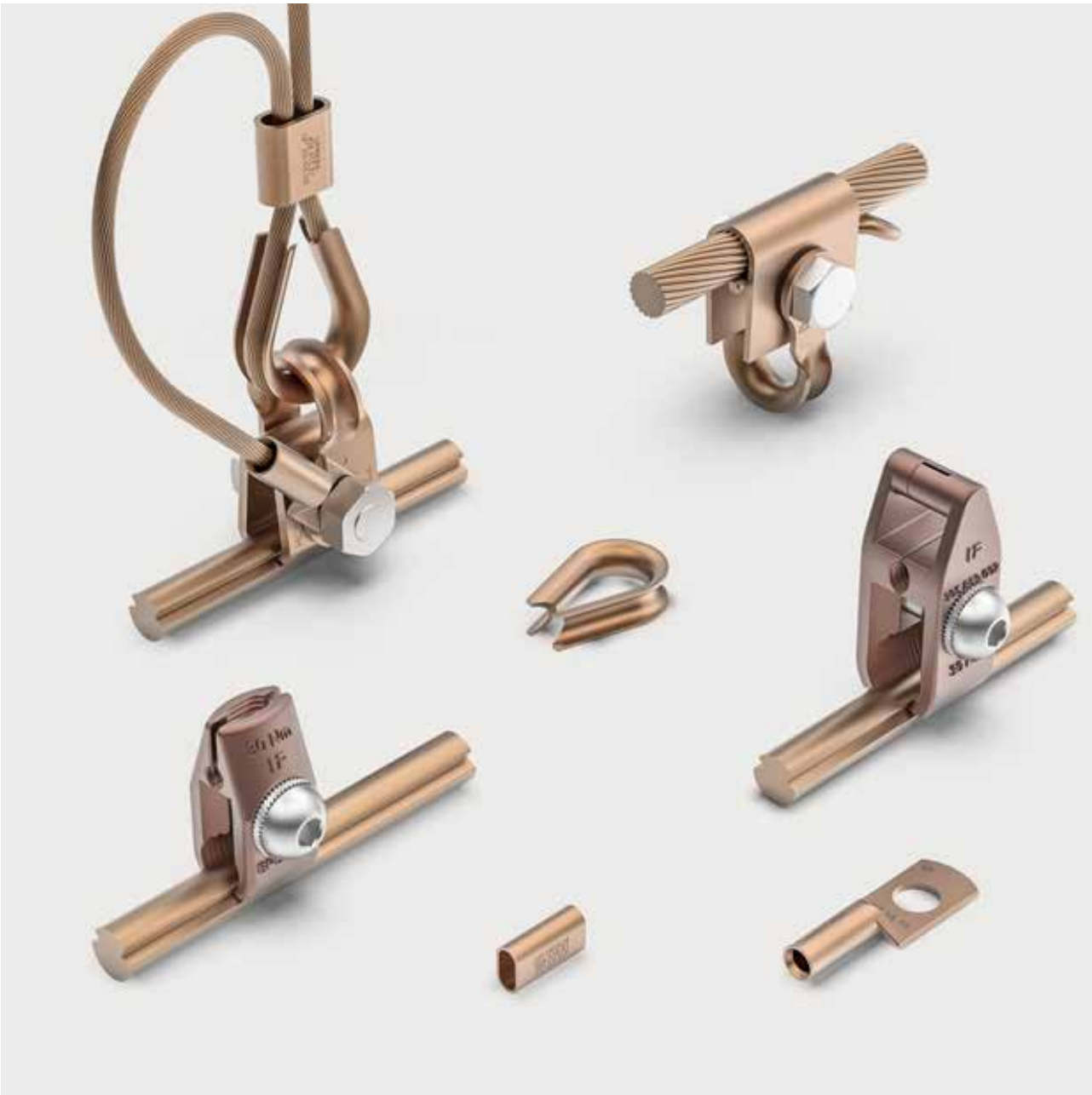
Application:
- This clamp is used to connect the earthing electrodes with the copper wires

Material:
- Forged parts : Brass CW 617N (UNE-EN 12165)
- U-Bolt: St. Steel (A2) (EN ISO 3506)
- Nuts: St. Steel (A2) (EN ISO 3506)
- Washers: St. Steel (A2) (EN ISO 3506)





DROPPERS



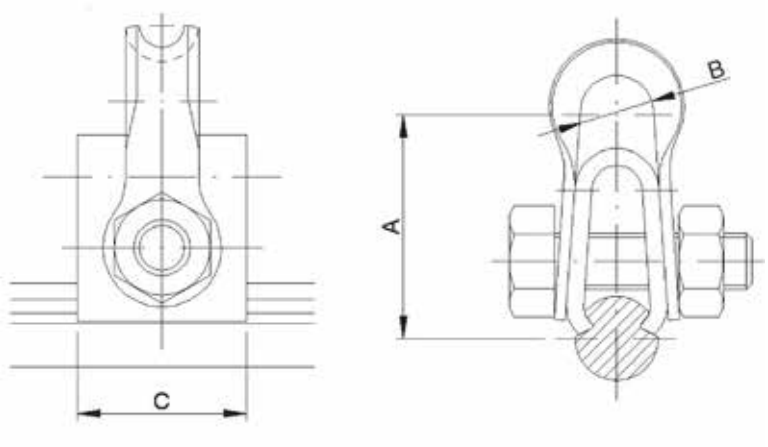
Content

Dropper Clamp for contact Wire

L.-No.	ID-Code	Contact wire	Dimensions (mm)			Material	Tightening torque (Nm)
			A	B	C		
625 012 000	625 012 CONJ	AC/BC 80 - 150	39,7	14	30	CuNi2Si	25
625 310 001		AC/BC 80 - 150	39,7	14	30	CuNi2Si	25
625 310 002		AC/BC 80 - 150	39,7	14	30	A2	25

Application:
- The clamps are used to connect droppers to the contact wire

Material:
- Forged parts: CuNi2Si or A2
- Loop: CuNi2Si or A2
- Screw: St. Steel (A2-70) (EN ISO 3506)
- Nut: St. Steel (A2-70) (EN ISO 3506)

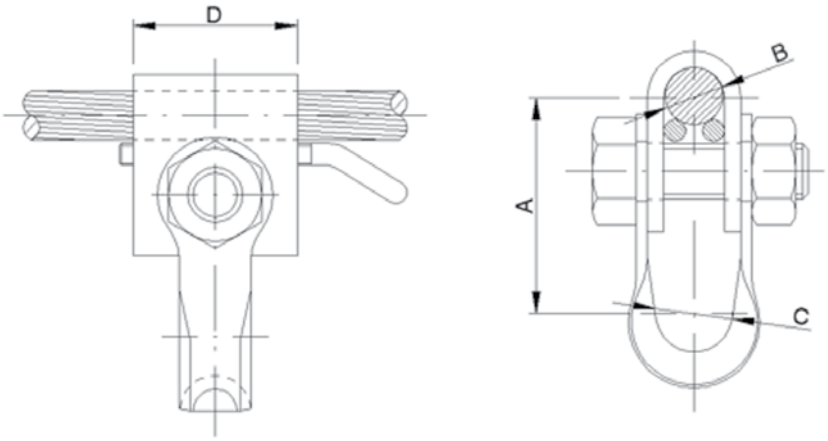


Dropper Clamp for messenger Wire

L.-No.	ID-Code	No pin alternative (mm2)	Wire Cross section (mm)	Tightening Torque (mm)	
				M10	M12
234 180 001	TCT5.120x2.18	95 - 185	18	38	65
234 180 002	TCT5.120x2.24	95 - 185	24	38	65

Application:
- The clamps are used to connect droppers to the messenger wire

Material:
- Forged parts: CuNi2Si
- Loop: CuNi2Si
- Screw: St. Steel (A2) (EN ISO 3506)
- Nut: St. Steel (A2) (EN ISO 3506)
- Pin: Bz II

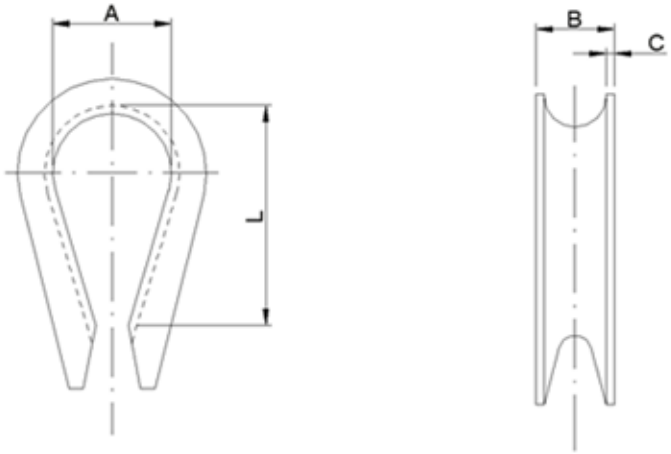


Thimble

L.-No.	ID-Code	Material	Wire Cross section (mm2)	Dimensions (mm)			
				L	A	B	C
625 012 710	625.012.71	Cu-ETP	16F - 25F	27	14,5	10	1
625 012 712	625.012.712V1	St. Steel A2	10F - 12F	21	14	8	1
625 012 713	625.012.712CU	Cu-ETP	10F - 12F	23	13	7	1
625 012 810	625.012.81	St. Steel A2	16F - 25F	35,7	22,5	12	1,2
625 012 813	625.012.81CU	Cu.-ETP	16F - 25F	39,75	21,5	11,5	1,5
625 012 910	625.012.91	St. Steel A4	65	50	29	15	1,5

Application:
- This part is used for wire loops to protect the wire from wear

Material:
- See table above



Compression Sleeve

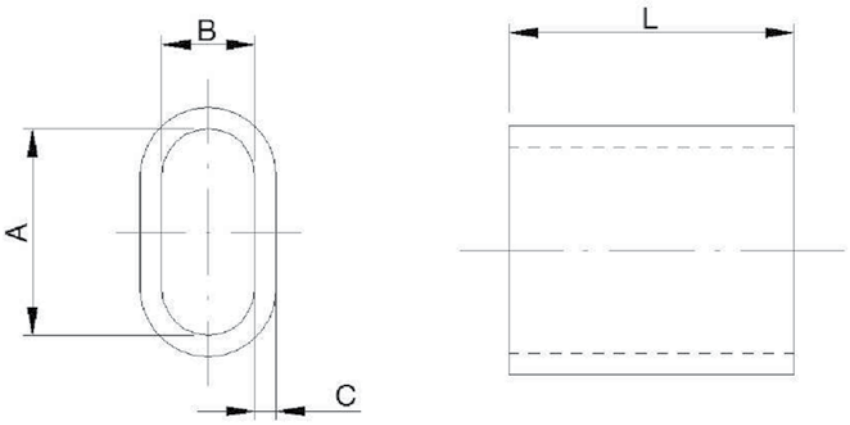
L.-No.	ID-Code	Wire Cross section (mm2)	Dimensions (mm)				Compression die
			L	A	B	C	
625 012 410	625.012.41	10F	20	10	5	0,75	HG 10, 8 PO
625 308 001 *)		10F	20	10	5	0,75	DB 10 K
625 012 003	625.012.M3 V	12F	20	11	5,4	1,5	HG 15, 8 PO
625 012 510	625.012.51	16F	20	14,5	6,5	1,5	HG 16, 12 PO
625 012 610	625.012.61	25F	20	15	8,7	1,5	HG 17, 16 PO

*) Remark: DB-Approval drawing Ebs 20.01.07-2

Suitable manual compression tool: e.g. Primat O2, item no. 303 088 088
e.g. Primat 06-T, item no. 303 871 002

Application:
- This part is used for wire loops

Material:
- Cu-ETP (EN12165)



Cable Lugs

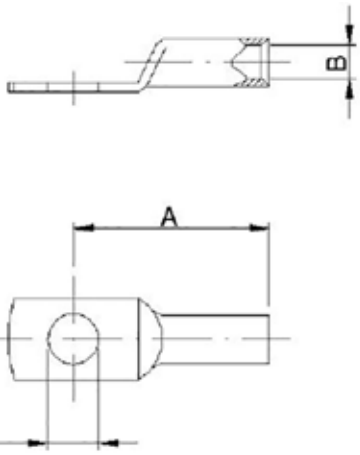
L.-No.	Wire cross section (mm2)	Dimensions (mm) A	B	C	Compression die	Item no.	Remark
300 004 004	10F - 12F	36	5,5	10,5	8	300 353 356	
300 008 008	16F - 25	36	7	10,5	10 / 9 ***)	300 353 358 / 300 353 357	
625 307 001 *)	10F		5	10,2	10 K	304 328 328	DB cable lug
625 312 001 *)	10F		5,4	10,5			DB filling for cable lug

*) DB-Approval drawing Ebs 07.42.26-2, manual compression tool type O2, item no. 303.088.088
**) according DIN 48083 part IV
***) For wire 16F, 1st compression with tool code 10, 2nd compression with tool code 9 For wire 25 only one compression with tool code 10

Suitable manual compression tool: e.g. Type GO6, item no. 303 871 003

Application:
- This part is used for wire connections

Material:
- Cu-ETP (EN12165)

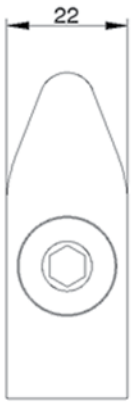


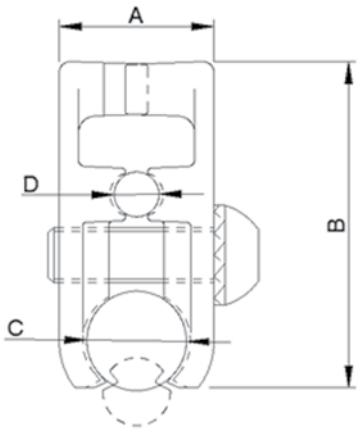
Dropper Clamp with current carrying Loop

L.-No.	ID-Code	Contact wire	Messenger Wire Cross section (mm2)	Dimensions (mm)				Tightening torque (Nm)
				L	A	B	C	
305 859 035	305 859 35	-	35	24	54	8	8,4	30
305 859 570	305 859 50 70*	AC/BC 107 - 150	50 - 70	20	47	9,25-11,25	5	30
305 859 120	305 859 120	AC/BC 107 - 150	95 - 120	24	57	14,3	8,4	30
305 859 002	305 859 002	AC/BC 107 - 150	150 - 185	28	59	18	8,1	30
305 859 300	305 859 300	-	300	26	65	22,5	7,5	30

Application:
- For droppers with thimble and current carrying loop
- These clamps are used on messenger wire and contact wire for droppers with easy installation of current carrying loop

Material:
- Hot forged parts: CuNi2Si
- Screw: St. Steel (A2) (EN ISO 3506)
- Washer: St. Steel (A2) (EN ISO 3506)



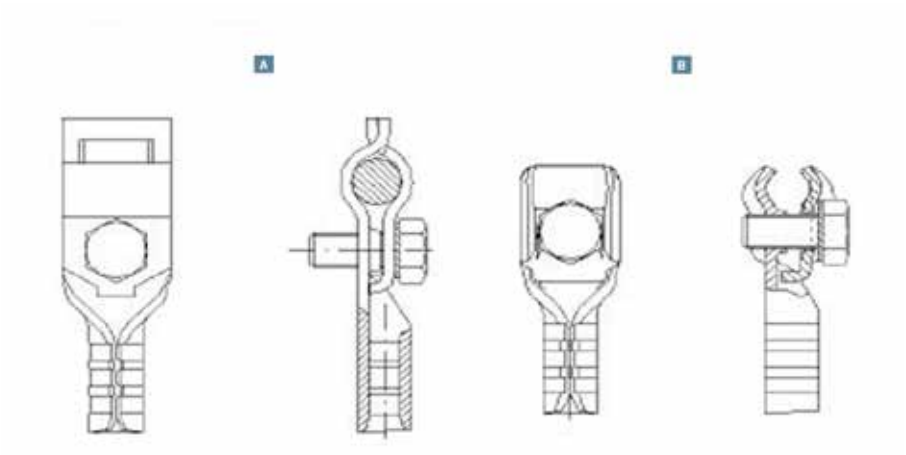


Cold forged dropper Clamp

L.-No.	ID-Code	Application	MW / CW cross section (mm2)	Dropper wire cross section (mm2)	Tightening Torque (Nm)	Compres-sion die	Item no.
625 013 001	G-VT.1	Messenger wire	95	Cu/Bz 25	12	13	300 353 361 *)
625 014 001	G-VT.2	Messenger wire	35	Cu/Bz 25	12	13	300 353 361 *)
625 015 001	625 015 VUP	Messenger wire	150 - 184	Cu/Bz 25	12	13	300 353 361 *)
625 016 001	625 016 VUP	Contact wire	AC/BC 107 - 150	Cu/Bz 25	20	13	300 353 361 *)

Application:
- For droppers, current feeding
- These clamps are used on messenger wire and contact wire for droppers

Material:
- Cold forged parts: Cu-ETP (UNE-EN 13599)
- Screw: St. Steel (A2) (EN ISO 3506)
- Washer: St. Steel (A2) (EN ISO 3506)



Dropper Clamp for contact Wire and messenger Wire

L.-No.	ID-Code	Application	MW / CW cross section (mm2)	Dropper wire cross section (mm2)	Tightening Torque (Nm)	Compression die	Item no.
302 823 003	302 823 003	AC/BC 80 -120	50	Bz 10F	10	300 353 358 *) 300 608 002 **)	300 353 361 *)
302 825 825	302 825 825	AC/BC 80 -120	50	Bz 25F	13	300 353 361 *) 300 608 004 **)	300 353 361 *)
303 848 002	303 848 002	AC/BC 80 -120	70 - 95	BZ 16F	13	300 353 361 *) 300 608 004 **)	300 353 361 *)

*) Suitable manual compression tool: e.g. Type GO6, item no. 303 871 003
**) Suitable compression head: e.g. Size III, item no. 305.678.009
**) Suitable electrical hydraulic compression pump: e.g. EHP 850 bar, item no. 305.853.012
**) Suitable foot operated hydraulic compression pump: e.g. FP 850 bar, item no. 305.799.002

Application:
- For droppers, current feeding
- These clamps will be used on messenger wire and contact wire for droppers

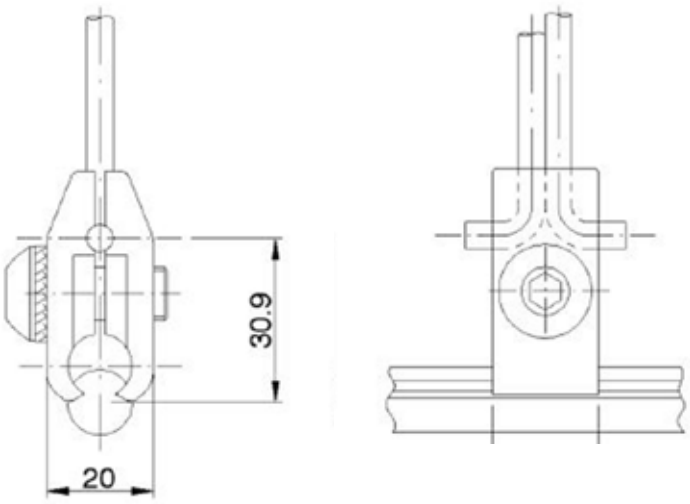
Material:
- Hot forged parts: CuNi2Si
- Screw: St. Steel (A2) (EN ISO 3506)

Contact Wire dropper Clamp

L.-No.	ID-Code	Contact wire (mm)	Tightening Torque (Nm)	Weight (kg)
625 020 001	EPEN 108	AC/BC 80 - 150	30	0,105

Application:
- Droppers for short system heights
- For current carrying droppers
- Where small and lightweight dropper clamps are required
- These clamps are used for current carrying droppers

Material:
- Forged parts: CuNi2Si (UNE-EN 12165
- Screw: St. Steel (A2-70) (EN ISO 3506)
- Washer: St. Steel (A2) (EN ISO 3506)



WIRE JOINTS

Content

Contact Wire splice riveted

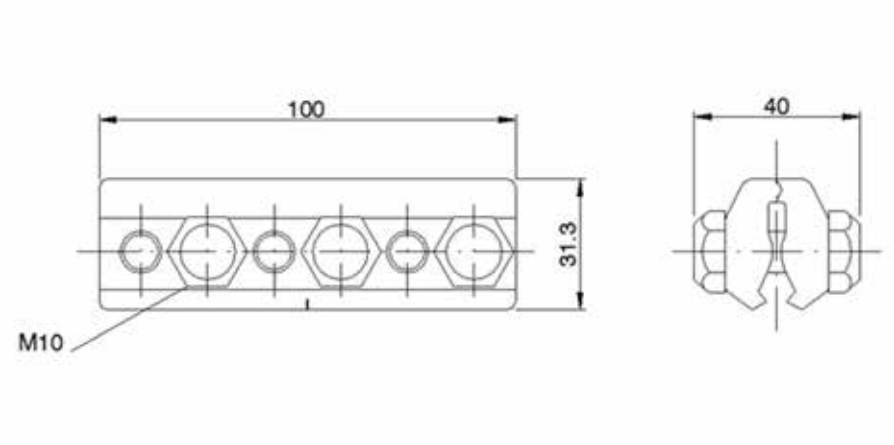
L.-No.	Contact wire	Appropiate die for compressing	Appropiate die for removing	Weight (kg)	Remarks
302 391 391	AC/BC 80 - 120	DB4-N / UIC-107	DB4-L / UIC-107	0,37	Ebs 07.42.23 *)

*) DB-Approval drawing

Suitable compression head: e.g. Size III, item no. 305.678.009
Suitable electrical hydraulic compression pump: e.g. EHP 850 bar, item no. 305.853.012 Suitable foot operated hydraulic compression pump: e.g. FP 850 bar, item no. 305.799.002

Application:
- Electrical and mechanical connection
- Traction wire splice
- This clamp is used to connect grooved overhead contact wires with full tension

Material:
- Forged parts: CuNi2Si (UNE-EN 12165)
- Screw: St. Steel (A2) (EN ISO 3506)
- Rivet: Cu-ETP (UNE-EN 12165)



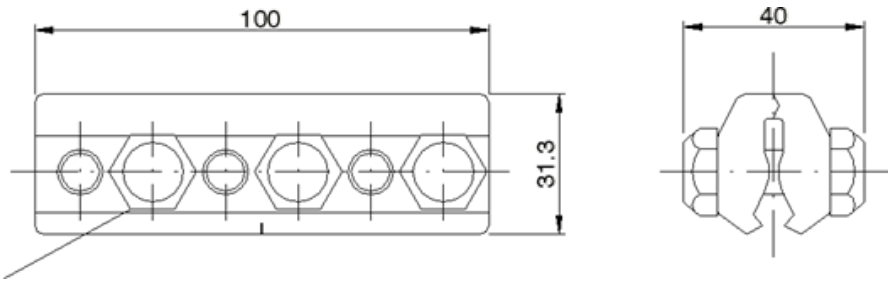
Contact Wire splice screw-type

L.-No.	Contact wire	Tightening torque M10 (Nm)	Weight (kg)	Remarks
302 537 537	AC/BC 80 - 120	44	0,5	Ebs 07.42.59 *)

*) DB-Approval drawing

Application:
- Electrical and mechanical connection
- Traction wire splice
- This clamp is used to connect grooved overhead contact wires with full tension

Material:
- Forged parts: CuNi2Si (UNE-EN 12165)
- Screw: St. Steel (A2) (EN ISO 3506)



Compression Joint for Bz and StCu Wires

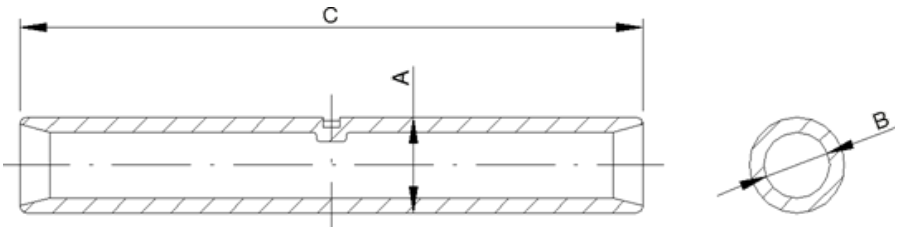
L.-No.	Type of device *)	Conductor Cross section	Dimensions A	B	C	Compression die	No. of comp	Width	Comp. force	Comp. die part No.
300 293 293 *)	a	25	13,5	6,3	110	13	3-3	14	240	300.608.004
300 294 294 *)	b	35	15,5	7,5	110	15	3-3	14	240	300.608.006
300 295 295 *)	c	50	17,5	9,0	110	17	3-3	14	240	300.608.008
300 296 296 *)	d	70	20	10,5	110	19	3-3	14	240	300.608.010
300 297 297 *)	e	95	21	12,5	142	21	4-4	14	240	300.608.012
303 801 801 *)	f	120	24	14,0	140	23	4-4	14	240	300.608.015

*) DB-Approval drawing Ebs 07.42.24
**) according DIN 48083 part IV

Suitable compression head: e.g. Size III, item no. 305.678.009
Suitable electrical hydraulic compression pump: e.g. EHP 850 bar, item no. 305.853.012 Suitable foot operated hydraulic compression pump: e.g. FP 850 bar, item no. 305.799.002

Application:
- Full tension compression joint
- For Bz I-II and Staku I-III wires
- These compression joints are used to form a full-tension connection between Bronze and Steel Copper wires

Material:
- CuNiSi



Compression Joint for Cu Wires

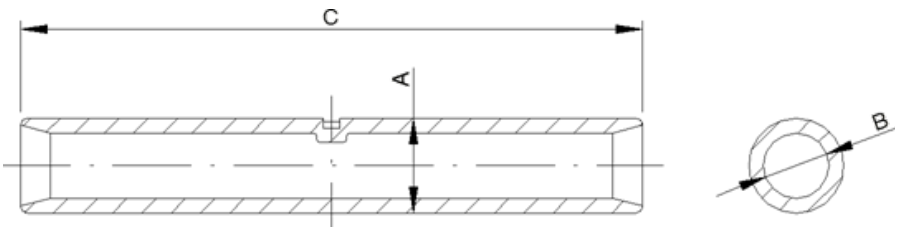
L.-No.	Type of device *)	Conduc-tor Cross section	Dimensions A	B	C	Com-pression die	No. of comp	Width	Comp. force	Comp. die part No.
305 573 002 *)	a	25	10,2	7	80	10	5-5 / 5	-	60 / -	300 438 443
300 950 950 *)	b	50	14,5	10	95	14	6-6 / 5	-	60 / -	300 438 447
300 951 001 *)	c	70	16,5	11,5	95	16	6-6 / 5	-	60 / -	300 438 448
305 513 002 *)	d	95	21	14	145	20	8-8 / 5	4-4 / 14	60 - 240	300 438 451/ 300 608 011
300 953 953*)	e	120	23	15	160	22	8-8 / 5	4-4 / 14	300 608 011	300 438 452/ 300 608 014
300 954 954		150 - 153	25	17	182	25	12-12 / 5	4-4 / 14	60 - 240	300 438 453/ 300 608 016
300 955 001		182 - 185	30	18,5	260	30	-	5-5 / 14	300 608 014	300 608 019
300 956 001		240 - 242	34,5	21,5	310	34	-	6-6 / 14	60 - 240	300 608 021

*) DB-Approval drawing Ebs 20.01.17
**) according DIN 48083 part IV

Suitable compression head: e.g. Size III, item no. 305.678.009,
Suitable manual compression tool: e.g. Type GO6, item no. 303 871 003
Suitable electrical hydraulic compression pump: e.g. EHP 850 bar, item no. 305.853.012 Suita-

Application:
- Full tension compression joint
- For Cu messenger wires, DIN 48201
- These compression joints are used to form a full-tension connection of copper wires

Material:
- Cu-ETP



Compression Joints for AISt wires

L.-No.	Type of device *)	Conduc-tor Cross section	Dimensions				Compression die Alu			Compression die Steel		
			A	B	C	L	Tool Code	No. of comp.	Item No.	Tool Code	No. of comp.	Item No.
305 231 004		48-AL1/ 8-ST1A	16	10	95	280	16**)	9-9	300 608 007	7**)	6-6	300 512 514 ***)
305 509 016		94-AL1/22-ST1A	25	15,5	128	410	25	6-6	300 308 016	13	4-4	300 608 004
305 509 018		147-AL1/34-ST1A	28	19	140	410	28	6-6	300 308 018	15	4-4	300 608 006
305 231 011 *)	c	184-AL1/ 30-ST1A	30,5	15	140	435	30**)	6-6	300 608 019	15**)	4-4	300 608 006
305 231 015 *)	d	243-AL1/ 39-ST1A	34,5	15	140	480	34**)	7-7	300 608 021	15**)	4-4	300 608 006
305 522 025		242-AL1/ 39-ST1A	34,5	23	140	480	34	7-7	300 608 021	15	4-4	300 608 006
305 231 016		264-AL1/ 34-ST1A	38,5	15	140	525	38**)	8-8	300 608 022	15**)	4-4	300 608 006

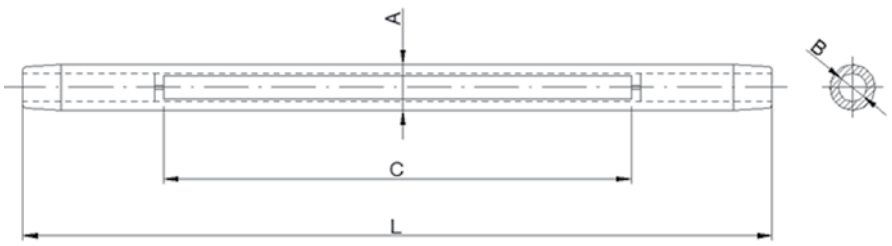
*) DB-Approval drawing Ebs 20.01.18
**) according DIN 48083 part IV

Suitable compression head: e.g. Size III, item no. 305.678.009
***) Suitable manual compression tool: e.g. Type GO6, item no. 303 871 003
Suitable electrical hydraulic compression pump: e.g. EHP 850 bar, item no. 305.853.012 Suitable foot operated hydraulic compression pump: e.g. FP 850 bar, item no. 305.799.002

Compression joints for other wire sizes are available on request.

Application:
- Full tension connection
- For steel reinforced aluminium conductors acc. EN 50182 Type AL1/ST1A
- The compression joints comprise of an inner steel sleeve combined with an outer aluminium sleeve
- The joints are used for a full-tension connection of Aluminium/Steel cables

Material:
- Aluminium (EN AW-1050A)
- Steel sleeve S355J2 (tZn)



INSULATORS

Content

Silicone Composite Insulators

Overview

Mosdorfers Silicone Composite Insulators are available in a variety of configurations for systems ranging from 3kV DC, 15kV & 25kV AC. The insulators shown on the following pages are only examples from our extensive insulator product range. Mosdorfer can provide tailor-made solutions for all railway appplications. Please contact Mosdorfer for your specific needs.

Composite insulators offer significant advantages over porcelain and glass insulators:
- Superior hydrophobicity and the ability to transfer their intrinsic properties through the pollution layer.
- Superior tracking and erosion resistance.
- Excellent pollution performance.
- Light weight, lower construction and transportation costs.
- Vandalism resistant.
- High strength to weight ratio
- Improved line aesthetics

Tension insulators:
Tension and suspension insulators with alternating shed profiles for improved electrical performance. Units are design and tested in accordance with EN 50124, IEC 62621 and IEC 61109.
Available in a range of end fitting configurations

Cantilever Insulators:
Cantilever insulators with alternating shed profiles for improved electrical performance. Units are design and tested in accordance with EN 50124, IEC 62621 and IEC 61952.
Available in a range of end fitting configurations

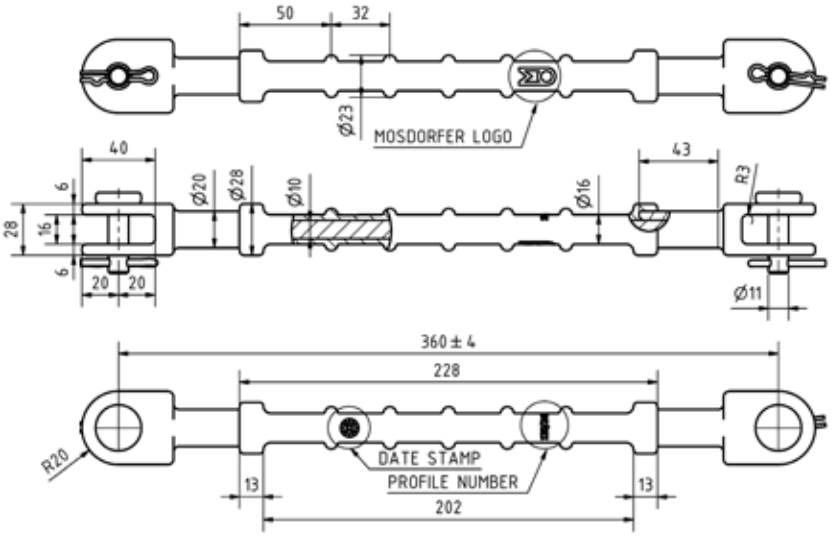
Post / Feeder insulators:
Cantilever insulators with alternating shed profiles for improved electrical performance. Units are design and tested in accordance with EN 50124, IEC 62621 and IEC 61952.
Available in a range of end fitting configurations

750 V - 1,5 kV DC Tension Insulator (20 kN)

L.-No.	System Voltage (kV)	Power frequency withstand (wet) (kV)	Lightning impulse withstand voltage (kV)	Minimum creep-age distance (mm)	Specified mechanical load (SML) (kN)	Weight (kg)
801 011 001	3	40	125	240	20	1,4

Application:
- Tension insulator

Material:
- Polymeric Housing: Injection Moulded HTV Silicone Rubber with ATH Filler (Grey, min. 3mm thk)
- Composite Core: Pultruded ECR-Glass Fibre & Epoxy Resin (Ø10mm Rod)
- End Fitting Steel: Hot Dip Galv. in acc. to EN ISO 1461 (min. ave. 85Øm thk)

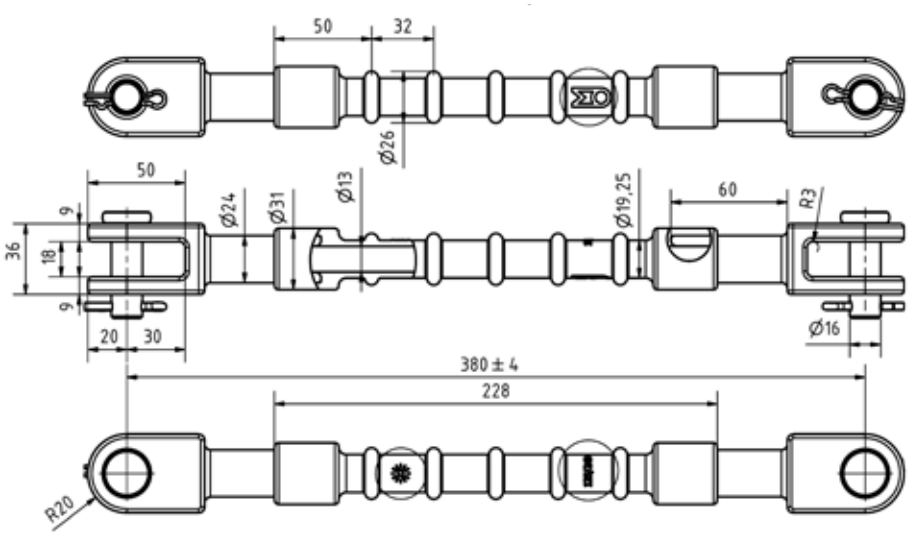


750 V - 1,5 kV DC Tension Insulator (70 kN)

L.-No.	System Voltage (kV)	Power frequency withstand (wet) (kV)	Lightning impulse withstand voltage (kV)	Minimum creep-age distance (mm)	Specified mechanical load (SML) (kN)	Weight (kg)
801 021 001	3	40	125	240	70	1,9

Application:
- Tension insulator

Material:
- Polymeric Housing: Injection Moulded HTV Silicone Rubber with ATH Filler (Grey, min. 3mm thk)
- Composite Core: Pultruded ECR-Glass Fibre & Epoxy Resin (Ø13mm Rod)
- End Fitting Steel: Hot Dip Galv. in acc. to EN ISO 1461 (min. ave. 85Øm thk)

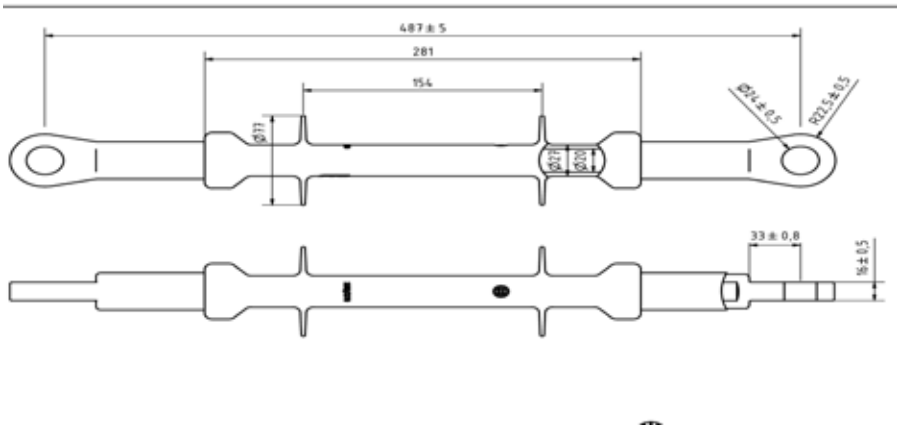


3 kV DC Tension Insulator 155/370

L.-No.	System Voltage (kV)	Power frequency withstand (wet) (kV)	Lightning impulse withstand voltage (kV)	Minimum creep-age distance (mm)	Specified mechanical load (SML) (kN)	Weight (kg)
803 011 001	3	45	155	370	135	1,7

Application:
- Tension insulator

Material:
- Housing: Injection Moulded HTV Silicone with ATH Filler (Grey RAL 7040, min. 3mm thk)
- Composite Core: Pultruded ECR-Glass Fibre and Epoxy Resin (Ø20mm Rod)
- End Fittings: Steel - Hot Dip Galv. in acc. to ISO 1461 (min. ave. 85µm thk)

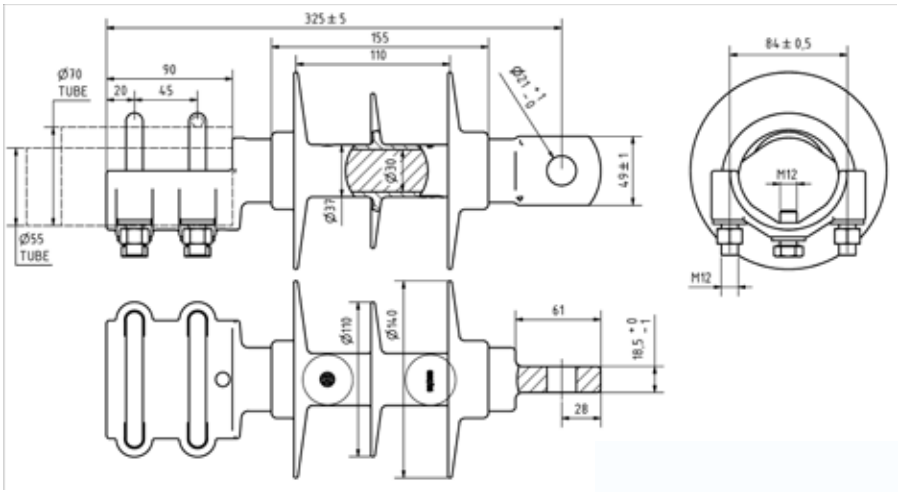


3 kV DC Cantilever Insulator 95/380

L.-No.	System Voltage (kV)	Power frequency withstand (wet) (kV)	Lightning impulse withstand voltage (kV)	Minimum creep-age distance (mm)	Specified mechanical load (SML) (kN)	Weight (kg)
803 022 001	3	40	95	380	25	3,1

Application:
- Tension insulator

Material:
- Housing: Injection Moulded HTV Silicone with ATH Filler (Grey RAL 7040, min. 3mm thk)
- Composite Core: Pultruded ECR-Glass Fibre and Epoxy Resin (Ø20mm Rod)
- End Fittings: Steel - Hot Dip Galv. in acc. to ISO 1461 (min. ave. 85µm thk)

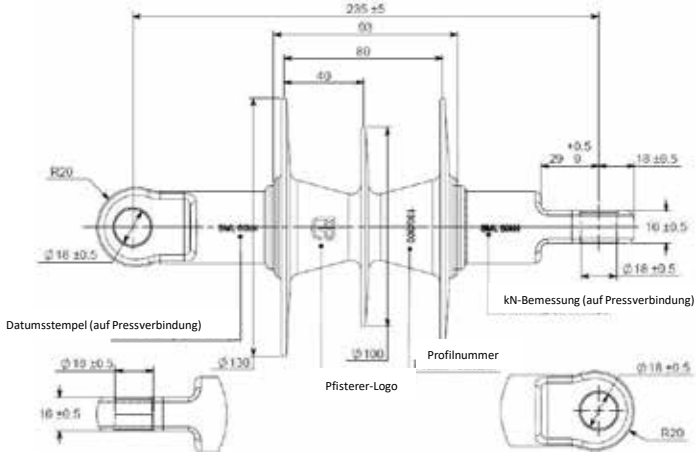


3 kV DC Tension Insulator 130/300

L.-No.	System Voltage (kV)	Power frequency withstand (wet) (kV)	Lightning impulse withstand voltage (kV)	Minimum creepage distance(mm)	Specified mechanical load (SML) (kN)	Weight (kg)
144 034 386	3	40	130	300	60	1,18

Application:
- Tension Insulator

Material:
- Polymeric Housing: Injection Moulded HTV Silicone Rubber with ATH Filler (Grey RAL 7015, min. 3mm thk)
- Composite Core: Pultruded ECR-Glass Fibre and Epoxy Resin (Ø25mm Rod)
- End Fittings: Steel - Hot Dip Galv. in acc. to EN ISO 1461 (min. ave. 85µm thk)

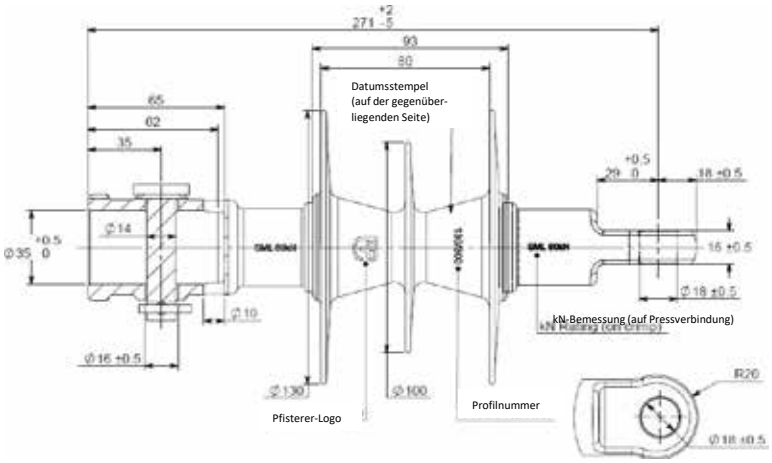


3 kV DC Cantilever Insulator 130/300

L.-No.	System Voltage (kV)	Power frequency withstand (wet) (kV)	Lightning impulse withstand voltage (kV)	Minimum creepage distance(mm)	Specified mechanical load (SML) (kN)	Weight (kg)
144 034 387	3	40	130	300	60	1,49

Application:
- Cantilever Insulator

Material:
- Polymeric Housing: Injection Moulded HTV Silicone Rubber with ATH Filler (Grey RAL 7015, min. 3mm thk)
- Composite Core: Pultruded ECR-Glass Fibre and Epoxy Resin (Ø25mm Rod)
- End-Fittings: SG42 - Hot Dip Galv. in acc. to EN ISO 1461 (min. ave. 85µm thk)

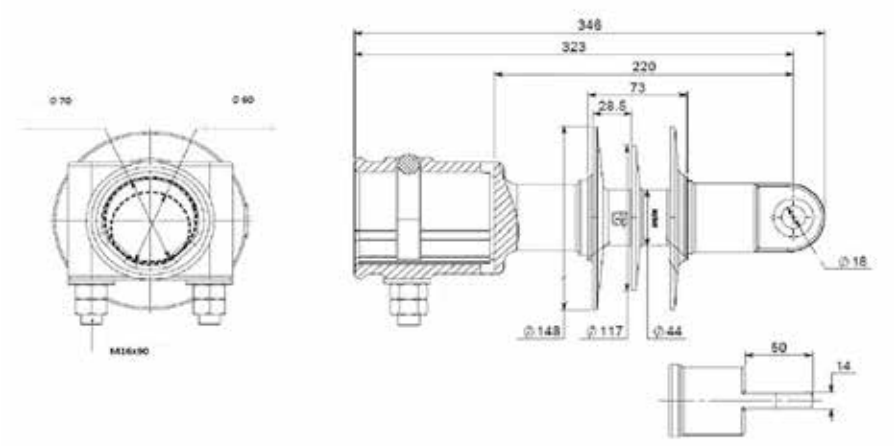


3 kV DC Cantilever Insulator 90/305

L.-No.	System Voltage (kV)	Power frequency withstand(wet) (kV)	Lightning impulse withstand voltage (kV)	Minimum creepage distance(mm)	Specified load		Max. Design cantilever load (MDCL)	Weight (kg)
					Tensile (STL)	Cantilever (SCL)		
144 034 282	3	35	90	305	60	10	6	5,72

Application:
- Cantilever Insulator

Material:
- Housing: Injection Moulded HTV Silicone with ATH Filler (Grey RAL 7015, min. 3mm thk)
- Composite Core: Pultruded ECR-Glass Fibre and Epoxy Resin (Ø19mm Rod)
- End Fittings: Steel - Hot Dip Galv. in acc. to ISO 1461 (min. ave. 85µm thk)

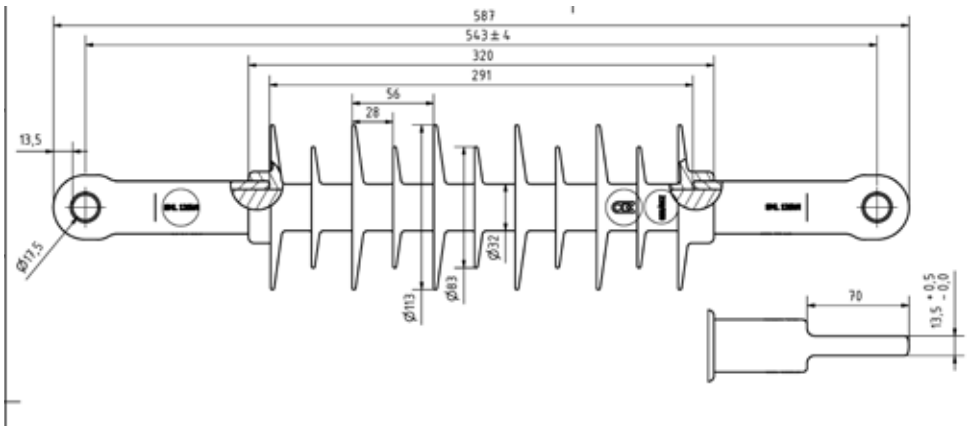


15 kV AC Tension Insulator 190/950

L.-No.	System Voltage (kV)	Power frequency withstand (wet) (kV)	Lightning impulse withstand voltage (kV)	Minimum creepage distance(mm)	Specified mechanical load (SML) (kN)	Weight (kg)
804 011 001	15	90	210	950	120	2,20

Application:
- Tension Insulator

Material:
- Polymeric Housing: Injection Moulded HTV Silicone Rubber with ATH Filler (Grey RAL 7040, min. 3mm thk.)
- Composite Core: Pultruded ECR-Glass Fibre and Epoxy Resin (Ø25mm Rod)
- End-Fittings: Drop Forged Steel - Hot Dip Galv. in acc. to EN ISO 1461 (min. ave. 120µm thk.)

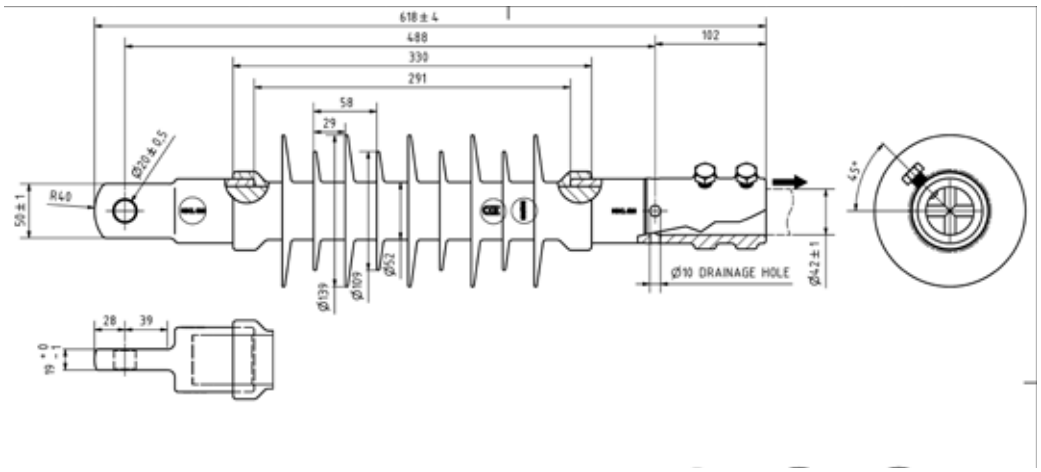


15 kV AC Canitlever Insulator 210/900

L.-No.	System Voltage (kV)	Power frequency withstand(wet) (kV)	Lightning impulse withstand voltage (kV)	Minimum creepage distance(mm)	Specified load		Max. Design cantilever load (MDCL)	Weight (kg)
					Tensile (STL)	Cantilever (SCL)		
804 022 002	15	90	210	900	90	12,0	6,0	5,75

Application:
- Cantilever Insulator

Material:
- Polymeric Housing: Injection Moulded HTV Silicone Rubber with ATH Filler (Grey RAL 7040, min. 3mm thk.)
- Composite Core: Pultruded ECR-Glass Fibre and Epoxy Resin (Ø45mm Rod)
- End-Fittings: Steel - Hot Dip Galv. in acc. to EN ISO 1461 (min. ave. 85µm thk)

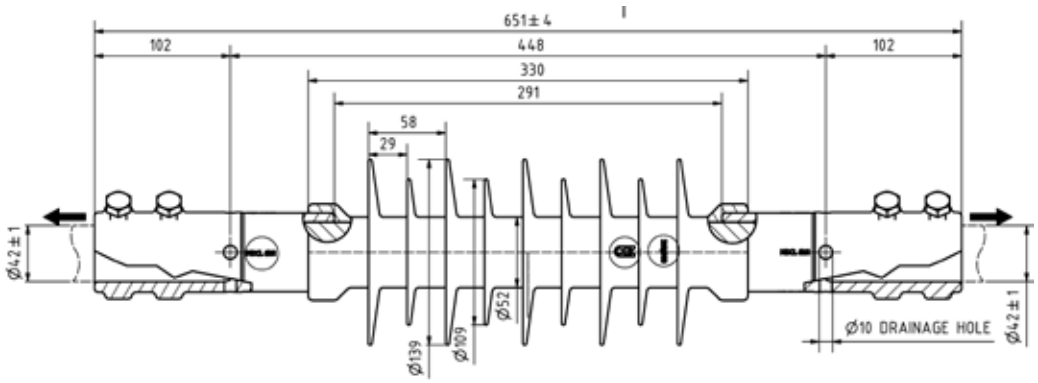


15 kV AC Canitlever Insulator 210/900

L.-No.	System Voltage (kV)	Power frequency withstand(wet) (kV)	Lightning impulse withstand voltage (kV)	Minimum creepage distance(mm)	Specified load		Max. Design cantilever load (MDCL)	Weight (kg)
					Tensile (STL)	Cantilever (SCL)		
804 022 003	15	90	210	900	90	12,0	6,0	6,64

Application:
- Cantilever Insulator

Material:
- Polymeric Housing: Injection Moulded HTV Silicone Rubber with ATH Filler (Grey RAL 7040, min. 3mm thk.)
- Composite Core: Pultruded ECR-Glass Fibre and Epoxy Resin (Ø45mm Rod)
- End-Fittings: Steel - Hot Dip Galv. in acc. to EN ISO 1461 (min. ave. 85µm thk)

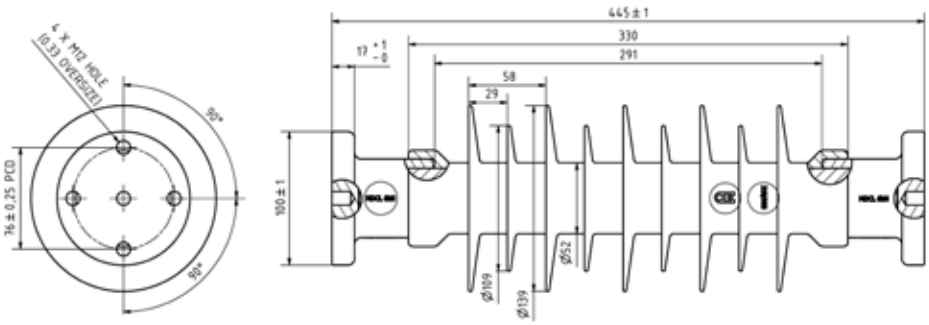


15 kV AC Post Insulator 210/900

L.-No.	System Voltage (kV)	Power frequency withstand(wet) (kV)	Lightning impulse withstand voltage (kV)	Minimum creepage distance(mm)	Specified load		Max. Design cantilever load (MDCL)	Weight (kg)
					Tensile (STL)	Cantilever (SCL)		
804 022 001	15	90	210	900	90	12,0	6,0	5,2

Application:
- Post Insulator

Material:
- Polymeric Housing: Injection Moulded HTV Silicone Rubber with ATH Filler (Grey RAL 7015, min. 3mm thk.)
- Composite Core: Pultruded ECR-Glass Fibre and Epoxy Resin (Ø44mm Rod)
- End-Fittings: Steel - Hot Dip Galv. in acc. to EN ISO 1461 (min. ave. 85µm thk)

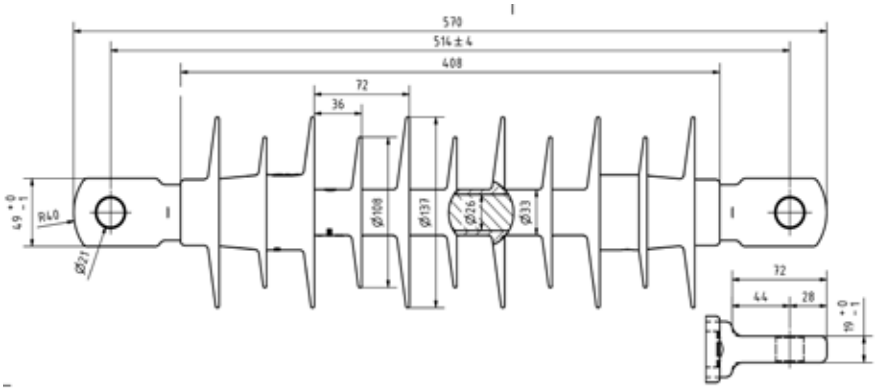


25 kV AC Tension Insulator 250/1240

L.-No.	System Voltage (kV)	Power frequency withstand (wet) (kV)	Lightning impulse withstand voltage (kV)	Minimum creepage distance(mm)	Specified mechanical load (SML) (kN)	Weight (kg)
805 011 001	25	125	250	1240	135	3,4

Application:
- Tension Insulator

Material:
- Housing: Injection Moulded HTV Silicone with ATH Filler (Grey RAL 7040, min. 3mm thk)
- Composite Core: Pultruded ECR-Glass Fibre and Epoxy Resin (Ø26mm Rod)
- End Fittings: Steel - Hot Dip Galv. in acc. to EN ISO 1461 (min. ave. 120µm thk)

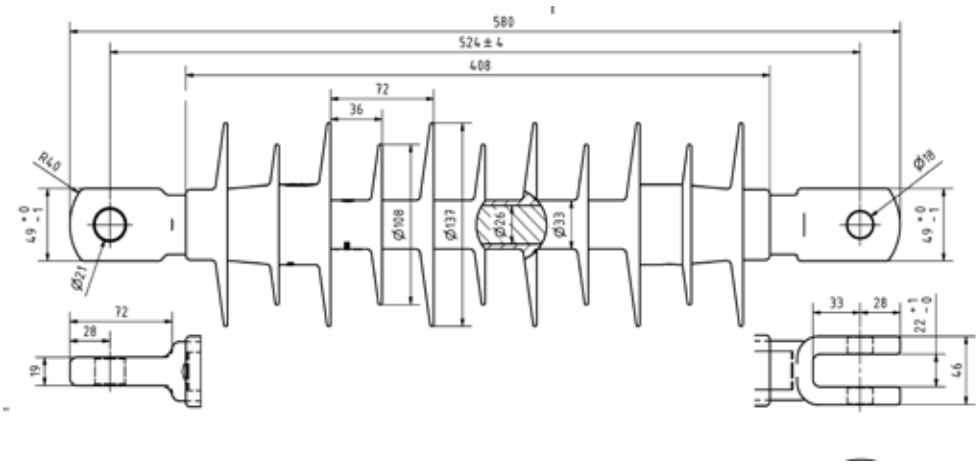


25 kV AC Tension Insulator 250/1240

L.-No.	System Voltage (kV)	Power frequency withstand(wet) (kV)	Lightning impulse withstand voltage (kV)	Minimum creepage distance(mm)	Specified mechanical load (SML) (kN)	Weight (kg)
805 011 002	25	125	250	1240	135	3,4

Application:
- Tension Insulator

Material:
- Housing: Injection Moulded HTV Silicone with ATH Filler (Grey RAL 7040, min. 3mm thk)
- Composite Core: Pultruded ECR-Glass Fibre and Epoxy Resin (Ø26mm Rod)
- End Fittings: Steel - Hot Dip Galv. in acc. to EN ISO 1461 (min. ave. 85µm thk)

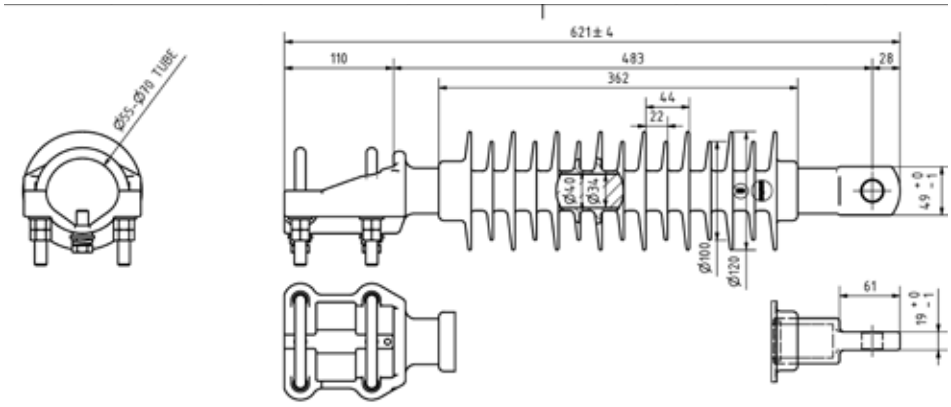


25 kV AC Cantilever Insulator 250/1260

L.-No.	System Voltage (kV)	Power frequency withstand(wet) (kV)	Lightning impulse withstand voltage (kV)	Minimum creepage distance(mm)	Specified load		Max. Design cantilever load (MDCL)	Weight (kg)
					Tensile (STL)	Cantilever (SCL)		
805 032 001	25	125	250	1260	60	6,0	1,9	5,4

Application:
- Cantilever Insulator

Material:
- Housing: Injection Moulded HTV Silicone with ATH Filler (Grey RAL 7040, min. 3mm thk)
- Composite Core: Pultruded ECR-Glass Fibre and Epoxy Resin (Ø38mm Rod)
- End Fittings: Steel - Hot Dip Galv. in acc. to ISO 1461 (min. ave. 85µm thk)
- U Bolt: Stainless Steel

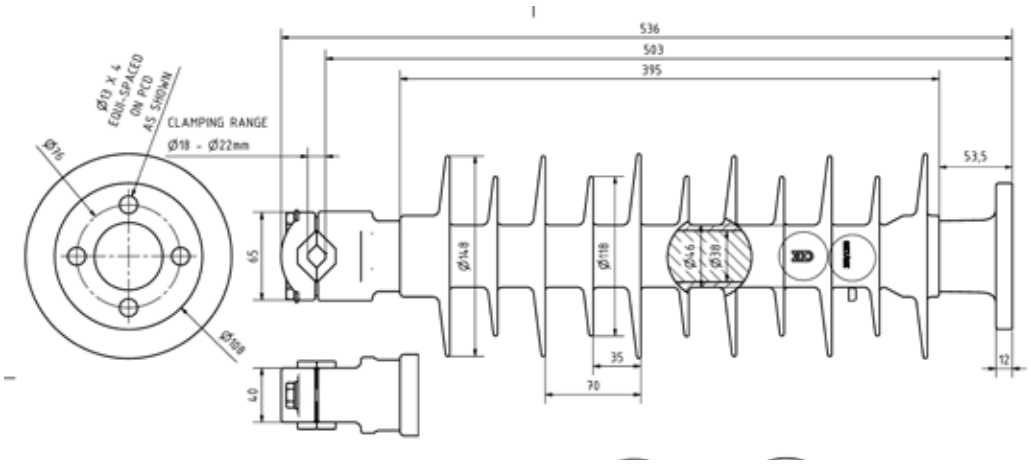


25 kV AC Post Insulator 250/1250

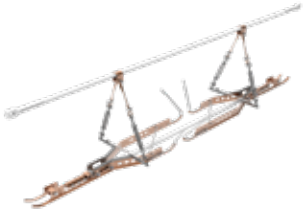
L.-No.	System Voltage (kV)	Power frequency withstand(wet) (kV)	Lightning impulse withstand voltage (kV)	Minimum creepage distance(mm)	Specified load		Max. Design cantilever load (MDCL)	Weight (kg)
					Tensile (STL)	Cantilever (SCL)		
805 023 001	25	125	250	1250	60	8	2,4	5,42

Application:
- Post Insulator

Material:
- Housing: Injection Moulded HTV Silicone with ATH Filler (Grey RAL 7040, min. 3mm thk)
- Composite Core: Pultruded ECR-Glass Fibre and Epoxy Resin (Ø38mm Rod)
- End Fittings: Steel - Hot Dip Galv. in acc. to EN ISO 1461 (min. ave. 85µm thk)



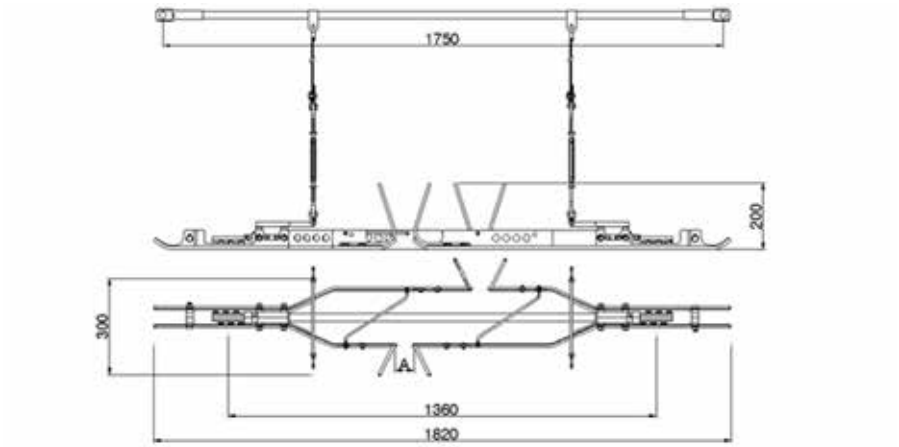
3 kV Section Insulators, Single contac Wire



L.-No.	ID-Code	Contact wire	Insulating length (mm)	Distance between arcing horns	Total width (mm)	Max. design speed (km/h)	Weight (kg)
305 422 101	305 422 DDH SD2 V2	AC/BC 80 - 120	955	65	220	80	15

Application:
- This insulator is used to electrically isolate and separate sections

Material:
- Insulators: GRP/PTFE
- Deflectors: Cu-ETP
- Spark conductors: St. Steel
- Turnbuckles: St. Steel
- Supports: Cu-ETP
- Contact wire joints: CuNi2Si F50
- Hangers: Cu-ETP
- Cable tighteners: Cu-ETP
- Saddle clamp: Cu-ETP

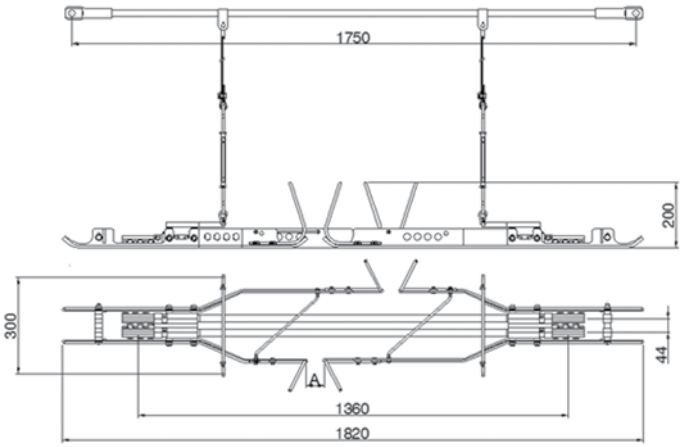


3 kV Section Insulators, Double contact Wire

L.-No.	ID-Code	Contact wire	Insulating length (mm)	Distance between arcing horns	Total width (mm)	Max. design speed (km/h)	Weight (kg)
305 422 102	305 422 DDH DD2 V2	AC/BC 80 - 120	955	65	220	80	20

Application:
- This insulator is used to electrically isolate and separate sections

Material:
- Insulators: GRP/PTFE
- Deflectors: Cu-ETP
- Spark conductors: St. Steel
- Turnbuckles: St. Steel
- Supports: Cu-ETP
- Contact wire joints: CuNi2Si F50
- Hangers: Cu-ETP
- Cable tighteners: Cu-ETP
- Saddle clamp: Cu-ETP



TENSOREX C+ SPRING TENSIONING SYSTEM

Content

TENSOREX C+

Overview

TENSOREX C+ is an automatic tensioning device that uses the force of a spiral spring to constantly tension the railway contact wire and/or messenger wire. It therefore effectively compensates the expansion caused by fluctuating daytime and night-time temperatures as well as the change in the seasons while keeping the tension at a constant level.

Applications:
- For railways and tramways
- Best solution for portals, tunnels, noise protection walls and platforms
- Inner-city installations where low visual impact is requested

Advantages:
- **Highest safety**
  Designed and built for maximum safety. No falling counterweights in the event of an accident.
- **Highest reliability**
  Every TENSOREX C+ unit is tested before shipping to the customer and supplied with test certificate.
- **Lowest life cycle costs**
  Minimal installation time and costs. Little maintenance work required, only visual inspection needed.
- **Compact design**
  Easy handling and transportation, Esthetical solution for inner-city installations.
- **Fast installation**
  Delivered ready to install, no assembly required, no weights have to be installed.
- **No tensioning weights required**
  Vandalism resistant. Free space on the mast base - escape routes are not blocked.
- **High precision**
  Constant tightening force over the entire compensation range, Fast and precise response - very small traction force hysteresis.
- **Purely mechanical device**
  Requires no additional power supply and electronics. No influences due to temperature changes

How it works:
TENSOREX C+ exerts a constant pulling force on the connected catenary wires. The tensile force is independent of the temperature-related length changes of the ropes. The one or more spiral springs are firmly connected to two pulleys (one on each side) on the same shaft. The degree of rotation of the shaft results in a variable torque, which is compensated by the variable radius of the pulleys. This produces a constant pulling force over the entire working

TENSOREX C+

Product family

TENSOREX C+ consists of seven different sizes with different numbers and sizes of springs. From the smallest 1-spring unit to the very powerful 5-spring unit with extra-long springs, the TENSOREX C+ range covers all application requirements for tram and rail applications

Size	Springs	Drawing Nr.	Compensation Length *) (mm)	Pull force *) (kg)	weight (kg)
TRC+ 1	9,5 x 60	000700696	800 to 450	450 to 800 (4,5 to 8kN)	90
TRC+ 2	9,5 x 60	000700697	1000 to 400	500 o 1800 (5,0 to 18 kN)	120
TRC+ 3	9,5 x 60	000700698	1100 to 450	850 to 2400 (8,5 to 24 kN)	150
TRC+ 4	9,5 x 60	000700699	1100 to 450	1350 to 3000 (13,5 to 30 kN)	180
TRC+ 4S	11 x 60	000700695	1100 to 675	1500 to 2800 (15 to 28 kN)	235
TRC+ 5S	11 x 60	000700694	1100 to 550	2000 to 4000 (20 to 40 kN)	290
TRC+ 5SL	11 x 60 XL	000700693	1100 to 650	2400 to 4000 (24 to 40 kN)	350

*) Please note, that not all combinations of pull force and compensation length are possible due to technical limitations. Possible combinations (TENSOREX C+ variants) are listed on the following pages. For more details please contact Mosdorfer Rail.

Product selection:
This information will be needed to select the right TENSOREX C+ type.
- Requested COMPENSATION or REGULATION length (range between 450 mm and 1100 mm)
- Requested PULL FORCE (range between 450 and 4000 kg / 4,5 and 40 kN)

The parameters above define the basic designation of the model type:
TENSOREX C+ COMPENSATION (in mm) / PULL FORCE (in kg)
Example: TENSOREX C+ 750/1000 - with 750mm compensation length and 1000 kg pull force.

Additional necessary information:
- Contact / messenger wire tension length (from fix point to the tensioning device)
- Temperature range (Delta T)
- Medium standard temperature (to define the middle point of the compensation range)
- Interface details (Type A or type B)
- Desired variant (if a non-standard variant is needed)
- Desired accessories

TENSOREX C+

Standard versions and variants

Installation set-up:
TENSOREX C+ can be installed vertically or horizontally:
- The vertical installation is the standard installation method. For this installation method a large variety of fixing brackets is available.
- Horizontal installation: Turned by 90°, for example tunnel installation where the available space (headroom) is limited. There are dedicated fixing brackets available

Installation Interface:
- The standard installation interface is referred to as the “Type A interface”. It consist of two hinge blocks, each 60 mm high, and with a 19 mm connecting pin.
- As an alternative to the Type A interface, Pfisterer offers an interface version that is compatible with a widely used connection standard in railway applications and in some regions also in tram applications. This type of interface is referred to as the „Type B inter face“. The interface has a 24 mm connecting axis, which is mounted between two L-profiles with a distance of 500mm (standard) or 400mm (compact).

Pull force orientation:
- The standard orientation of the pull force is horizontal (between 0° and -10°).
- For special applications, for example installation on portals, it is possible to order the TENSOREX C+ with a -60° or -80° pull-force orientation.

Enhanced corrosion protection:
- The steel parts of the TENSOREX C+ in standard version is corrosion protected with HDG coating (EN 1461).
- For installation sites in harsh environments, for example installation close to the sea front, we offer on request a special coating of the steel parts (Thermal spraying Zn coating as per ISO 2063 (1000 g / m2 or min 140 micron galvanization thickness).
- Stainless steel A4 version also available on request.

Spring Cover Colour:
- The standard colour is RAL 7040
- Other RAL colours are on request. Please note that the lead time will increase.

Optional Variant:
- Blocking type: Useful for special maintenance applications. TENSOREX C+ must be ordered pre-disposed together with blocking pins. Please ask for document “Blocking Pin – 000.300.502”

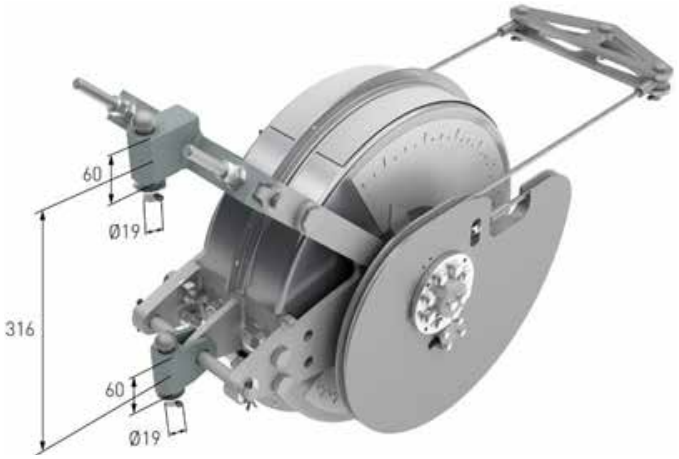
Spare parts:
- Ropes (set comprises of two ropes): The ropes connect the pulleys with the front balance. Please ask for document “Replacement of Ropes – 000.300.408”
- Front balance: The front balance connects the ropes with the catenary. *)

*) Please supply model number and serial number when ordering.

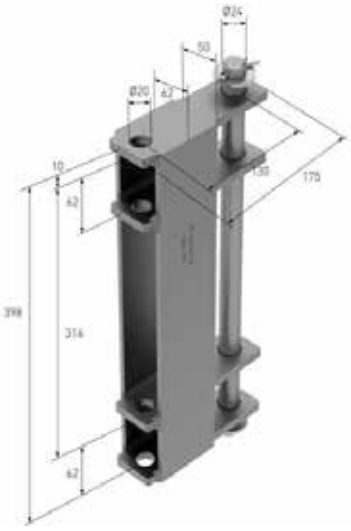
TENSOREX C+

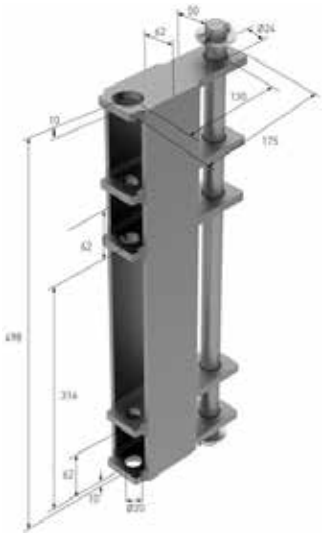
Installation Interface

Typ A Interface (Standard):
The standard interface to couple the TENSOREX C+ with the fixing brackets is called “Type A Interface”. The interface consists of two hinge blocks that fit into the mounting frame.



Typ B Interface (optional):
Especially for railway applications Pfisterer designed an alternative interface which is compatible to a widely used installation standard for connecting tensioning devices to poles. Sometimes it is referred as DB-standard. This Type B interface has been now completely redesigned and greatly improved in handling and functionality. The new interface is called the “New Type B Adaptor”.
The New Type B Adaptor is available in two versions, one version for the standard 500 mm DB-connection distance between the mounting profiles, the second version has been reduced in size for better handling and lower weight for non- DB-standard applications. The distance for the second version between the mounting profiles is 400 mm.





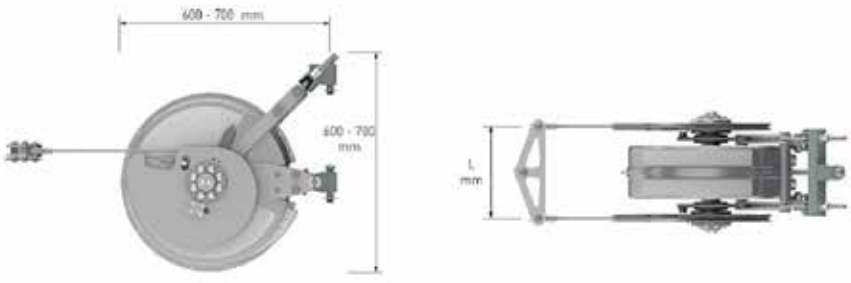
TENSOREX C+, 1-Spring-Model

Springs:	1 spring, 60x9,5mm
Weight:	90 kg
Design load:	40 kN
Minimum failing load:	65 kN
Service temperature:	-40°C to +70°C
GA drawing No.:	000700696
Horizontal rotation:	+/- 10°
Vertical inclination:	+ 0° / -10°
Front Balance Size L	270 mm

L.-No.	Description	Compensation (mm)	Pull Force (kg/kN)
000700435	Tensorex C+ 750/450, 1S	750	450 / 4,4
000700669	Tensorex C+ 800/450, 1S	800	450 / 4,4
000700850	Tensorex C+ 750/500, 1S	750	500 / 4,9
000700855	Tensorex C+ 450/600, 1S	450	600 / 5,9
000700497	Tensorex C+ 600/600, 1S	600	600 / 5,9
000701096	Tensorex C+ 550/650, 1S	550	650 / 6,4
000701204	Tensorex C+ 500/700, 1S	500	700 / 6,9
000700451	Tensorex C+ 450/750, 1S	450	750 / 7,4
000701067	Tensorex C+ 450/800, 1S	450	800 / 7,8

TENSOREX C+ with a 120 mm spring for special applications: *)

L.-No.	Description	Compensation (mm)	Pull Force (kg/kN)
000701248	Tensorex C+ 450/1000, 1S(120)	450	1000 / 9,8
000701249	Tensorex C+ 400/1125, 1S(120)	400	1125 / 11,0
000701250	Tensorex C+ 400/1100, 1S(120)	400	1100 / 10,8
000701251	Tensorex C+ 400/1050, 1S(120)	400	1050 / 10,3
000701252	Tensorex C+ 375/1200, 1S(120)	375	1200 / 11,8

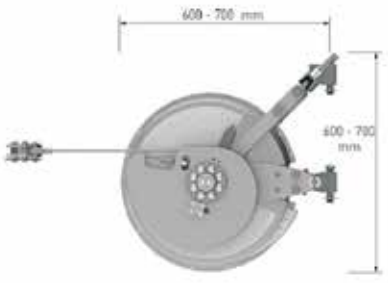


TENSOREX C+, 2-Spring-Model

Springs:	2 springs, 60x9,5mm
Weight:	120 kg
Design load:	40 kN
Minimum failing load:	65 kN
Service temperature:	-40°C to +70°C
GA drawing No.:	000700697
Horizontal rotation:	+/- 10°
Vertical inclination:	+ 0° / -10°
Front Balance Size L	270 mm

L.-No.	Description	Compensation (mm)	Pull Force (kg/kN)
000700684	Tensorex C+ 900/500, 2S	900	500 / 4,9
000700498	Tensorex C+ 750/600, 2S	750	600 / 5,9
000700477	Tensorex C+ 1000/600, 2S	1000	600 / 5,9
000701095	Tensorex C+ 1000/650, 2S	1000	650 / 6,4
000700476	Tensorex C+ 750/750, 2S	750	750 / 7,4
000700666	Tensorex C+ 900/750, 2S	900	750 / 7,4
000700481	Tensorex C+ 1000/750, 2S	1000	750 / 7,4
000700496	Tensorex C+ 750/800, 2S	750	800 / 7,8
000700663	Tensorex C+ 900/800, 2S	900	800 / 7,8
000700479	Tensorex C+ 750/850, 2S	750	850 / 8,3
000701039	Tensorex C+ 800/850, 2S	800	850 / 8,3
000700480	Tensorex C+ 850/850, 2S	950	850 / 8,3
000700484	Tensorex C+ 750/900, 2S	750	900 / 8,8
000700441	Tensorex C+ 750/1000, 2S	750	1000 / 9,8
000701127	Tensorex C+ 735/1020, 2S	735	1020 / 10,0
000700668	Tensorex C+ 700/1050, 2S	700	1050 / 10,3
000700494	Tensorex C+ 650/1100, 2S	650	1100 / 10,8
000700680	Tensorex C+ 650/1125, 2S	650	1125 / 11,0
000700425	Tensorex C+ 450/1200, 2S	450	1200 / 11,8

L.-No.	Description	Compensation (mm)	Pull Force (kg/kN)
000700475	Tensorex C+ 550/1200, 2S	550	1200 / 11,8
000700841	Tensorex C+ 600/1200, 2S	600	1200 / 11,8
000701097	Tensorex C+ 450/1225, 2S	450	1225 / 12,0
000701086	Tensorex C+ 550/1225, 2S	550	1225 / 12,0
000700692	Tensorex C+ 600/1250, 2S	600	1250 / 12,3
000700671	Tensorex C+ 450/1320, 2S	450	1320 / 12,9
000701077	Tensorex C+ 450/1345, 2S	450	1345 / 13,2
000701194	Tensorex C+ 525/1350, 2S	525	1350 / 13,2
000701174	Tensorex C+ 525/1360, 2S	525	1360 / 13,3
000700852	Tensorex C+ 450/1380, 2S	450	1380 / 13,5
000700859	Tensorex C+ 450/1425, 2S	450	1425 / 14,0
000700892	Tensorex C+ 500/1425, 2S	500	1425 / 14,0
000700423	Tensorex C+ 450/1500, 2S	450	1500 / 14,7
000701320	Tensorex C+ 500/1500, 2S	500	1500 / 14,7
000701304	Tensorex C+ 450/1575, 2S	450	1575 / 15,5
000700868	Tensorex C+ 450/1600, 2S	450	1600 / 15,7
000700459	Tensorex C+ 450/1640, 2S	450	1640 / 16,1
000700837	Tensorex C+ 400/1800, 2S	400	1800 / 17,7

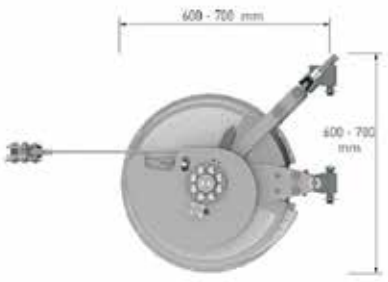


TENSOREX C+, 3-Spring-Model

Springs:	3 springs, 60x9,5mm
Weight:	150 kg
Design load:	40 kN
Minimum failing load:	65 kN
Service temperature:	-40°C to +70°C
GA drawing No.:	000700698
Horizontal rotation:	+/- 10°
Vertical inclination:	+ 0° / -10°
Front Balance Size L	340 mm

L.-No.	Description	Compensation (mm)	Pull Force (kg/kN)
000700871	Tensorex C+ 1100/750, 3S	1100	750 / 7,4
000700885	Tensorex C+ 1000/835, 3S	1000	835 / 8,2
000701038	Tensorex C+ 1000/850, 3S	1000	850 / 8,3
000700825	Tensorex C+ 1100/850, 3S	1100	850 / 8,3
000700887	Tensorex C+ 1000/875, 3S	1000	875 / 8,6
000701098	Tensorex C+ 900/1000, 3S	900	1000 / 9,8
000700482	Tensorex C+ 1000/1000, 3S	1000	1000 / 9,8
000700432	Tensorex C+ 1100/1000, 3S	1100	1000 / 9,8
000700828	Tensorex C+ 1100/1050, 3S	1100	1050 / 10,3
000700437	Tensorex C+ 750/1100, 3S	750	1100 / 10,8
000700683	Tensorex C+ 900/1100, 3S	900	1100 / 10,8
000700491	Tensorex C+ 1000/1100, 3S	1000	1100 / 10,8
000700886	Tensorex C+ 1000/1125, 3S	1000	1125 / 11,0
000700439	Tensorex C+ 750/1200, 3S	750	1200 / 11,8
000700845	Tensorex C+ 850/1200, 3S	850	1200 / 11,8
000700492	Tensorex C+ 900/1200, 3S	900	1200 / 11,8
000701027	Tensorex C+ 750/1225, 3S	750	1225 / 12,0
000701090	Tensorex C+ 840/1225, 3S	840	1225 / 12,0
000700455	Tensorex C+ 750/1250, 3S	750	1250 / 12,3
000701041	Tensorex C+ 850/1250, 3S	850	1250 / 12,3
000701074	Tensorex C+ 850/1275, 3S	850	1275 / 12,5
000700672	Tensorex C+ 750/1320, 3S	750	1320 / 12,9
000700846	Tensorex C+ 850/1320, 3S	850	1320 / 12,9
000701091	Tensorex C+ 840/1325, 3S	840	1325 / 13,0

L.-No.	Description	Compensation (mm)	Pull Force (kg/kN)
000701025	Tensorex C+ 750/1345, 3S	750	1345 / 13,2
000701092	Tensorex C+ 840/1345, 3S	840	1345 / 13,2
000701142	Tensorex C+ 850/1360, 3S	850	1360 / 13,3
000700454	Tensorex C+ 750/1375, 3S	750	1375 / 13,5
000701026	Tensorex C+ 750/1400, 3S	750	1400 / 13,7
000700493	Tensorex C+ 800/1400, 3S	800	1400 / 13,7
000701167	Tensorex C+ 600/1425, 3S	600	1425 / 14,0
000700440	Tensorex C+ 750/1425, 3S	750	1425 / 14,0
000700442	Tensorex C+ 750/1440, 3S	750	1440 / 14,1
000700433	Tensorex C+ 750/1500, 3S	750	1500 / 14,7
000700458	Tensorex C+ 700/1575, 3S	700	1575 / 15,5
000700870	Tensorex C+ 700/1600, 3S	700	1600 / 15,7
000700438	Tensorex C+ 650/1640, 3S	650	1640 / 16,1
000701044	Tensorex C+ 450/1680, 3S	450	1680 / 16,5
000701089	Tensorex C+ 550/1680, 3S	550	1680 / 16,5
000700821	Tensorex C+ 650/1700, 3S	650	1700 / 16,7
000701021	Tensorex C+ 600/1800, 3S	600	1800 / 17,7
000700424	Tensorex C+ 450/2000, 3S	450	2000 / 19,6
000700457	Tensorex C+ 550/2000, 3S	550	2000 / 19,6
000700427	Tensorex C+ 450/2100, 3S	450	2100 / 20,6
000701192	Tensorex C+ 500/2170, 3S	500	2170 / 21,3
000700490	Tensorex C+ 500/2250, 3S	500	2250 / 22,1
000700665	Tensorex C+ 450/2400, 3S	450	2400 / 23,5

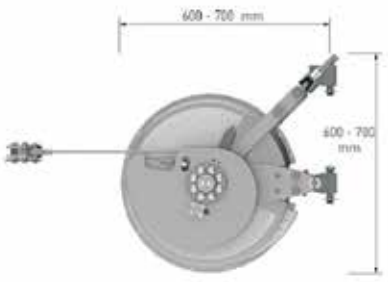


TENSOREX C+, 4-Spring-Model

Springs:	4 springs, 60x9,5mm
Weight:	180 kg
Design load:	40 kN
Minimum failing load:	65 kN
Service temperature:	-40°C to +70°C
GA drawing No.:	000700699
Horizontal rotation:	+/- 10°
Vertical inclination:	+ 0° / -10°
Front Balance Size L	410 mm

L.-No.	Description	Compensation (mm)	Pull Force (kg/kN)
000700833	Tensorex C+ 1350/1000, 4S	1350	1000 / 9,8
000700881	Tensorex C+ 1000/1150, 4S	1000	1150 / 11,3
000700691	Tensorex C+ 1000/1200, 4S	1000	1200 / 11,8
000700827	Tensorex C+ 1100/1200, 4S	1100	1200 / 11,8
000700884	Tensorex C+ 1000/1215, 4S	1000	1215 / 11,9
000700883	Tensorex C+ 1000/1225, 4S	1000	1225 / 12,0
000701203	Tensorex C+ 1100/1225, 4S	1100	1225 / 12,0
000701075	Tensorex C+ 1100/1275, 4S	1100	1275 / 12,5
000700847	Tensorex C+ 1000/1320, 4S	1000	1320 / 12,9
000700897	Tensorex C+ 1000/1345, 4S	1000	1345 / 13,2
000701193	Tensorex C+ 1100/1350, 4S	1100	1350 / 13,2
000701005	Tensorex C+ 1000/1360, 4S	1000	1360 / 13,3
000700670	Tensorex C+ 1000/1400, 4S	1000	1400 / 13,7
000700882	Tensorex C+ 1000/1425, 4S	1000	1425 / 14,0
000701058	Tensorex C+ 840/1500, 4S	840	1500 / 14,7
000700667	Tensorex C+ 900/1500, 4S	900	1500 / 14,7
000700483	Tensorex C+ 1000/1500, 4S	1000	1500 / 14,7
000701201	Tensorex C+ 980/1530, 4S	980	1530 / 15,0
000701002	Tensorex C+ 840/1600, 4S	840	1600 / 15,7
000700838	Tensorex C+ 900/1600, 4S	900	1600 / 15,7
000700436	Tensorex C+ 750/1640, 4S	750	1640 / 16,1
000700673	Tensorex C+ 750/1680, 4S	750	1680 / 16,5
000701093	Tensorex C+ 840/1680, 4S	840	1680 / 16,5
000700875	Tensorex C+ 750/1750, 4S	750	1750 / 17,2

L.-No.	Description	Compensation (mm)	Pull Force (kg/kN)
000700876	Tensorex C+ 850/1750, 4S	850	1750 / 17,2
000701000	Tensorex C+ 840/1780, 4S	840	1780 / 17,5
000700485	Tensorex C+ 750/1800, 4S	750	1800 / 17,7
000700489	Tensorex C+ 840/1800, 4S	840	1800 / 17,7
000701129	Tensorex C+ 750/1835, 4S	750	1835 / 18,0
000700864	Tensorex C+ 750/1875, 4S	750	1875 / 18,4
000701130	Tensorex C+ 750/1900, 4S	750	1900 / 18,6
000701123	Tensorex C+ 750/1940, 4S	750	1940 / 19,0
000700434	Tensorex C+ 750/2000, 4S	750	2000 / 19,6
000701128	Tensorex C+ 735/2040, 4S	735	2040 / 20,0
000700452	Tensorex C+ 700/2100, 4S	700	2100 / 20,6
000700449	Tensorex C+ 650/2150, 4S	650	2150 / 21,1
000700450	Tensorex C+ 650/2200, 4S	650	2200 / 21,6
000700848	Tensorex C+ 680/2200, 4S	680	2200 / 21,6
000700456	Tensorex C+ 650/2250, 4S	650	2250 / 22,1
000700478	Tensorex C+ 600/2400, 4S	600	2400 / 23,5
000700690	Tensorex C+ 625/2400, 4S	625	2400 / 23,5
000700488	Tensorex C+ 600/2500, 4S	600	2500 / 24,5
000701208	Tensorex C+ 525/2700, 4S	525	2700 / 26,5
000700682	Tensorex C+ 550/2700, 4S	550	2700 / 26,5
000700453	Tensorex C+ 550/2750, 4S	550	2750 / 27,0
000701057	Tensorex C+ 500/2800, 4S	500	2800 / 27,5
000700830	Tensorex C+ 450/3000, 4S	450	3000 / 29,4

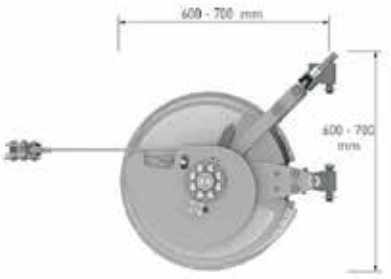


TENSOREX C+, 4S-Spring-Model

Springs:	4 springs, 60x11mm
Weight:	235 kg
Design load:	40 kN
Minimum failing load:	65 kN
Service temperature:	-40°C to +70°C
GA drawing No.:	000700695
Horizontal rotation:	+/- 10°
Vertical inclination:	+ 0° / -10°
Front Balance Size L	410 mm

L.-No.	Description	Compensation (mm)	Pull Force (kg/kN)
000700831	Tensorex C+ 1350/1200, 4SS	1350	1200 / 11,8
000700688	Tensorex C+ 1100/1500, 4SS	1100	1500 / 14,7
000701045	Tensorex C+ 1125/1500, 4SS	1125	1500 / 14,7
000700839	Tensorex C+ 1000/1600, 4SS	1000	1600 / 15,7
000700873	Tensorex C+ 1100/1600, 4SS	1100	1600 / 15,7
000700877	Tensorex C+ 1000/1650, 4SS	1000	1650 / 16,2
000700687	Tensorex C+ 1000/1680, 4SS	1000	1680 / 16,5
000700826	Tensorex C+ 1100/1700, 4SS	1100	1700 / 16,7
000701050	Tensorex C+ 1000/1800, 4SS	1000	1800 / 17,7
000701049	Tensorex C+ 1050/1800, 4SS	1050	1800 / 17,7
000701059	Tensorex C+ 840/1900, 4SS	840	1900 / 18,6
000701001	Tensorex C+ 840/1955, 4SS	840	1955 / 19,2
000701066	Tensorex C+ 750/2000, 4SS	750	2000 / 19,6
000701083	Tensorex C+ 840/2000, 4SS	840	2000 / 19,6

L.-No.	Description	Compensation (mm)	Pull Force (kg/kN)
000700689	Tensorex C+ 900/2000, 4SS	900	2000 / 19,6
000700822	Tensorex C+ 900/2100, 4SS	900	2100 / 20,6
000701195	Tensorex C+ 750/2150, 4SS	750	2150 / 21,1
000701196	Tensorex C+ 750/2200, 4SS	750	2200 / 21,6
000701082	Tensorex C+ 840/2250, 4SS	840	2250 / 22,1
000701131	Tensorex C+ 750/2350, 4SS	750	2350 / 23,1
000701144	Tensorex C+ 800/2350, 4SS	800	2350 / 23,1
000700659	Tensorex C+ 750/2400, 4SS	750	2400 / 23,5
000701133	Tensorex C+ 785/2400, 4SS	785	2400 / 23,5
000701048	Tensorex C+ 750/2500, 4SS	750	2500 / 24,5
000701132	Tensorex C+ 750/2550, 4SS	750	2550 / 25,0
000701036	Tensorex C+ 700/2590, 4SS	700	2590 / 25,4
000701062	Tensorex C+ 675/2800, 4SS	675	2800 / 27,5

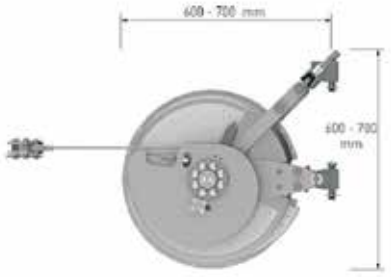


TENSOREX C+, 5S-Spring-Model

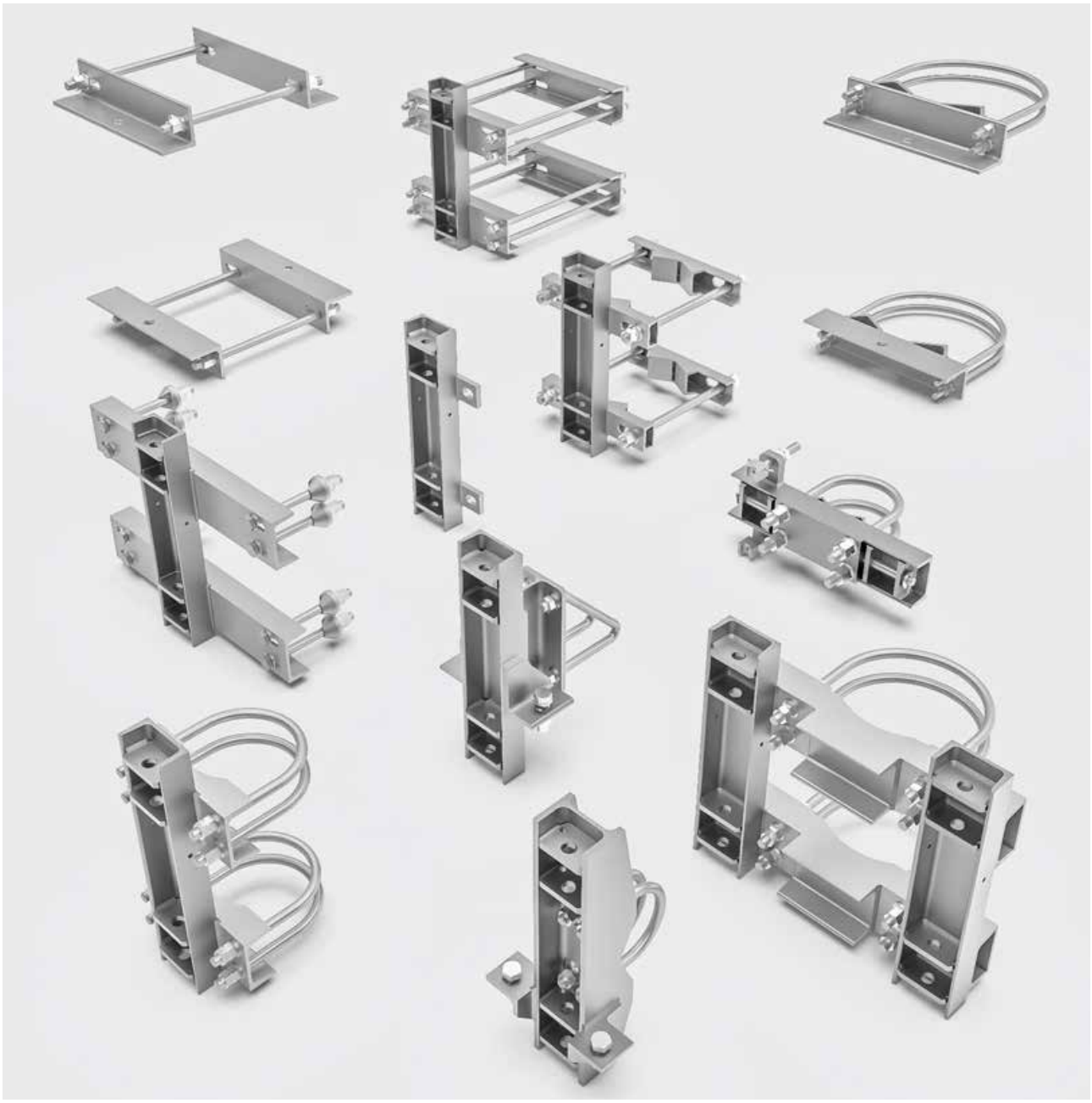
Springs:	5 springs, 60x11mm, ML: 5 XL springs, 60x11mm
Weight:	290 kg (ML: 350 kg)
Design load:	40 kN
Minimum failing load:	65 kN
Service temperature:	-40°C bis +70°C
GA drawing No.:	000700694 (ML: 000700693)
Horizontal rotation:	+/- 10°
Vertical inclination:	+ 0° / -10°
Front Balance Size L	482 mm

L.-No.	Description	Compensation (mm)	Pull Force (kg/kN)
000700834	Tensorex C+ 1350/1500, 5SS	1350	1500 / 14,7
000700832	Tensorex C+ 1350/1700, 5SS	1350	1700 / 16,7
000700878	Tensorex C+ 1000/1985, 5SS	1000	1985 / 19,5
000701032	Tensorex C+ 1000/2000, 5SS	1000	2000 / 19,6
000700840	Tensorex C+ 1100/2000, 5SS	1100	2000 / 19,6
000700880	Tensorex C+ 1000/2085, 5SS	1000	2085 / 20,5
000700829	Tensorex C+ 1100/2100, 5SS	1100	2100 / 20,6
000701020	Tensorex C+ 1050/2200, 5SS	1050	2200 / 21,6
000700879	Tensorex C+ 1000/2250, 5SS	1000	2250 / 22,1
000701006	Tensorex C+ 1000/2270, 5SS	1000	2270 / 22,3
000701022	Tensorex C+ 900/2400, 5SS	900	2400 / 23,5
000700842	Tensorex C+ 950/2400, 5SS	950	2400 / 23,5
000701191	Tensorex C+ 750/2500, 5SS	750	2500 / 24,5
000701023	Tensorex C+ 925/2500, 5SS	925	2500 / 24,5
000701035	Tensorex C+ 900/2590, 5SS	900	2590 / 25,4
000700836	Tensorex C+ 900/2600, 5SS	900	2600 / 25,5
000701051	Tensorex C+ 900/2640, 5SS	900	2640 / 25,9
000701141	Tensorex C+ 850/2720, 5SS	850	2720 / 26,7
000700835	Tensorex C+ 840/2800, 5SS	840	2800 / 27,5
000701176	Tensorex C+ 800/2850, 5SS	800	2850 / 28,0
000701122	Tensorex C+ 750/2860, 5SS	750	2860 / 28,1
000700824	Tensorex C+ 750/3000, 5SS	750	3000 / 29,4
000701134	Tensorex C+ 750/3060, 5SS	750	3060 / 30,0
000700819	Tensorex C+ 750/3150, 5SS	750	3150 / 30,9
000701004	Tensorex C+ 640/3630, 5SS	640	3630 / 35,6
000700899	Tensorex C+ 550/4000, 5SS	550	4000 / 39,2

L.-No.	Description	Compensation (mm)	Pull Force (kg/kN)
000701157	Tensorex C+ 1100/2200, 5SS-ML	1100	2200 / 21,6
000701156	Tensorex C+ 1100/2400, 5SS-ML	1100	2400 / 23,5
000701177	Tensorex C+ 1050/2500, 5SS-ML	1050	2500 / 24,5
000701175	Tensorex C+ 900/2850, 5SS-ML	900	2850 / 28,0
000701226	Tensorex C+ 825/3150, 5SS-ML	825	3150 / 30,9
000701171	Tensorex C+ 800/3300, 5SS-ML	800	3300 / 32,4
000701125	Tensorex C+ 780/3400, 5SS-ML	780	3400 / 33,4
000701184	Tensorex C+ 750/3560, 5SS-ML	750	3560 / 34,9
000701073	Tensorex C+ 700/3750, 5SS-ML	700	3750 / 36,8
000701081	Tensorex C+ 650/4000, 5SS-ML	650	4000 / 39,2
000701140	Tensorex C+ 625/4080, 5SS-ML	625	4080 / 40,0



TENSOREX C+ ATTACHMENTS



Content

Attachments Typ A, for circular Masts

L.-No.	Drawing No.	Back Fitting Type	Dimension (mm)
000 700 408 00000	000700408-00	A	Pole Ø 160 mm
000 700 408 00001	000700408-01	A	Pole Ø 215/219 mm
000 700 408 00002	000700408-02	A	Pole Ø 225/229 mm
000 700 408 00003	000700408-03	A	Pole Ø 168,3 mm
000 700 408 00004	000700408-04	A	Pole Ø 280 mm
000 700 408 00005	000700408-05	A	Pole Ø 193,7 mm
000 700 408 00006	000700408-06	A	Pole Ø 244,5 mm
000 700 408 00007	000700408-07	A	Pole Ø 323,9 mm
000 700 408 00008	000700408-08	A	Pole Ø 267 mm
000 700 408 00009	000700408-09	A	Pole Ø 240 mm
000 700 408 00010	000700408-10	A	Pole Ø 290 mm
000 700 408 00012	000700408-12	A	Pole Ø 273 mm
000 700 408 00013	000700408-13	A	Pole Ø 290 mm
000 700 408 00014	000700408-14	A	Pole Ø 290 mm INOX collar
000 700 408 00015	000700408-15	A	Pole Ø 280 mm INOX collar
000 700 408 00016	000700408-16	A	Pole Ø 185 mm
000 700 408 00017	000700408-17	A	Pole Ø 406,4 mm
000 700 408 00018	000700408-18	A	Pole Ø 300 mm
000 700 408 00019	000700408-19	A	Pole Ø 355,6 mm
000 700 408 00020	000700408-20	A	Pole Ø 285 mm
000 700 408 00021	000700408-21	A	Pole Ø 203 mm
000 700 408 00022	000700408-22	A	Pole Ø 254 mm
000 700 408 00023	000700408-23	A	Pole Ø 360 mm
000 700 408 00024	000700408-24	A	Pole Ø 440 mm
000 700 408 00025	000700408-25	A	Pole Ø 470 mm
000 700 408 00026	000700408-26	A	Pole Ø 457 mm
000 700 408 00027	000700408-27	A	Pole Ø 508 mm

Attachments Typ A, for walls

L.-No.	Drawing No.	Back Fitting Type	Dimension (mm)
000 042 187 00010	042187-10	A	4x M20, t-hole distance 148-168mm
000 042 187 00011	042187-11	A	4x M20, lot-hole distance 220-300mm

Attachments Typ A, for rectangular and peiner Masts

L.-No.	Drawing No.	Back Fitting Type	Dimension (mm)
000 700 415 00000	000700415-00	A	Pole H 200 – 310 x 360
000 700 415 00001	000700415-01	A	Pole H 200 – 310 x 310
000 700 415 00002	000700415-02	A	Pole H 200 – 310 x 220
000 700 415 00003	000700415-03	A	Pole H 200 – 310 x 255
000 700 415 00004	000700415-04	A	Pole H 200 – 310 x 90
000 700 415 00005	000700415-05	A	Pole H 200 – 310 x 240
000 700 415 00006	000700415-06	A	Pole H 200 – 310 x 580
000 700 415 00007	000700415-07	A	Pole H 320 x L of threaded rod
000 700 415 00008	000700415-08	A	Pole H 200 x 200
000 700 415 00009	000700415-09	A	Pole H 320 – 435 x 356
000 700 415 00010	000700415-10	A	Pole H 320 – 435 x 100
000 700 415 00011	000700415-11	A	Pole H 320 – 435 x 600
000 700 415 00013	000700415-13	A	Pole H 210 – 378 x 160
000 700 415 00014	000700415-14	A	Pole H 200 – 300 x 210
000 700 415 00016	000700415-16	A	Pole H 150 – 220 x 230
000 700 415 00017	000700415-17	A	Pole H 100 – 124 x 240
000 700 415 00018	000700415-18	A	Pole H 200 – 310 x 465
000 700 415 00019	000700415-19	A	Pole H 200 – 310 x 610
000 700 415 00020	000700415-20	A	Pole H 200 – 310 x 770
000 700 415 00030	000700415-30	A	Pole H 500 – 550 x 300

Attachments Typ A, for 2x TENSOREX C+ for parallel installation on rectangular

L.-No.	Drawing Nr.	Back Fitting Type	Dimension (mm)
000 700 461 00015	000700461-15	A / 2 Federn	Pole H 240 x 240 / D = 440
000 700 461 00019	000700461-19	A / 2 Federn	Pole H 306 x 300 / D = 500

Attachments Typ A, for 2x TENSOREX C+ for parallel installation on circular masts

L.-No.	Drawing No.	Back Fitting Type	Dimension (mm)
000 700 461 00000	000700461-00	A / 2 Federn	Pole Ø 215 – 219 / D = 400
000 700 461 00029	000700461-29	A / 3 Federn	Pole Ø 273 / D = 540
000 700 461 00035	000700461-35	A / 2 Federn	Pole Ø 406 / D = 380
000 700 461 00040	000700461-40	A / 4 Federn	Pole Ø 330 - 400 / D = 630

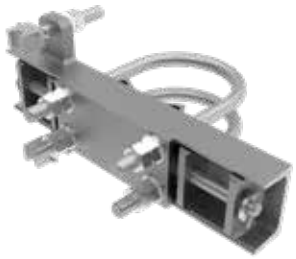
Attachments Typ A, adjustable for circular and circular tapered masts

L.-No.	Drawing No.	Back Fitting Type	Dimension (mm)
000 700 462 00000	000700462-00	A	Pole Ø 190 - 230 mm / 4xM16
000 700 462 00001	000700462-01	A	Pole Ø 160 - 240 mm / 8xM16
000 700 462 00002	000700462-02	A	Pole Ø 240 - 340 mm / 8xM16
000 700 462 00004	000700462-04	A	Pole Ø 115 - 230 mm / 4xM20
000 700 462 00005	000700462-05	A	Pole Ø 170 - 230 mm / 4xM20
000 700 462 00006	000700462-06	A	Pole Ø 115 - 170 mm / 4xM20
000 700 462 00007	000700462-07	A	Pole Ø 200 - 330 mm / 4xM20
000 700 462 00008	000700462-08	A	Pole Ø 240 - 340 mm / 4xM20
000 700 462 00010	000700462-10	A	Pole Ø 250 - 390 mm / 4xM20
000 700 462 00012	000700462-12	A	Pole Ø 200 - 330 mm / 4xM20

Attachments Typ A, for lattice Poles

L.-No.	Drawing No.	Back Fitting Type	Dimension (mm)
000 700 463 00000	000700463-00	A	450 - 500
000 700 463 00006	000700463-06	A	450 - 650

Attachments Typ A, for horizontal installation



L.-No.	Drawing No.	Back Fitting Type	Dimension (mm)
000 700 646 00020	000700646-20	A	Pole Ø 160, TRC+ 2S-3S
000 700 646 00028	000700646-28	A	Pole Ø 160, TRC+ 4S-5SS
000 700 646 00029	000700646-29	A	460x160 for portals, TRC+ 2S-3S
000 700 646 00030	000700646-30	A	460x200 for portals, TRC+ 2S-3S
000 700 646 00031	000700646-31	A	Pole Ø 160

Attachments Typ A, for band-IT fixings

L.-No.	Drawing No.	Back Fitting Type	Dimension (mm)
000 042 187 00001	042187-01	A	Pole Ø variabel

Attachments Typ A and B, for portals and other applications

Please contact Mosdorfer Rail for your specific application: office@mosdorfer.com

Attachments Typ B, for circular masts

L.-No.	Drawing No.	Back Fitting Type	Dimension (mm)
000 700 468 00001	000700468-01	B	Pole Ø 324 / 4xM16 U-bolts
000 700 468 00016	000700468-16	B	Pole Ø 203 / 4xM16 U-bolts
000 700 468 00017	000700468-17	B	Pole Ø 215 - 219 / 4xM16 U-bolts
000 700 468 00018	000700468-18	B	Pole Ø 235 / 4xM16 U-bolts
000 700 468 00019	000700468-19	B	Pole Ø 250 / 4xM16 U-bolts
000 700 468 00020	000700468-20	B	Pole Ø 255 / 4xM16 U-bolts
000 700 468 00022	000700468-22	B	Pole Ø 300 / 4xM16 U-bolts
000 700 468 00099	000700468-99	B	Pole Ø 277 / 4xM16 U-bolts

Attachments Typ B, for rectangular masts

L.-No.	Drawing No.	Back Fitting Type	Dimension (mm)
000 700 468 00000	000700468-00	B	Pole H 300 - 370 x 320 / 4xM20
000 700 468 00002	000700468-02	B	Pole H 200 - 300 x 300 / 4xM20
000 700 468 00004	000700468-04	B	Pole H 100 - 240 x 240 / 4xM20
000 700 468 00005	000700468-05	B	Pole H 570 - 680 x 220 / 4xM20
000 700 468 00007	000700468-07	B	Pole H 100 - 240 x 580 / 4xM20

Attachments Typ B, for lattice poles

L.-No.	Drawing No.	Back Fitting Type	Dimension (mm)
000 700 463 00001	000700463-01	B	280 - 410
000 700 463 00002	000700463-02	B	120 -260
000 700 463 00003	000700463-03	B	110 - 260
000 700 463 00004	000700463-04	B	1040 - 1240
000 700 463 00005	000700463-05	B	590 - 790
000 700 463 00008	000700463-08	B	208 - 304

Attachments Typ B, for 2x TENSOREX C+ for parallel installation on circular masts

L.-No.	Drawing No.	Back Fitting Type	Dimension (mm)
000 700 461 00001	000700461-01	B / 2 springs	Pole Ø 193,7 / D = 540
000 700 461 00010	000700461-10	B / 2 springs	Pole Ø 240 / D = 470
000 700 461 00011	000700461-11	B / 2 springs	Pole Ø 250 / D = 470
000 700 461 00012	000700461-12	B / 2 springs	Pole Ø 215 - 219 / D = 470
000 700 461 00020	000700461-20	B / 2 springs	Pole Ø 224 / D = 540
000 700 461 00034	000700461-34	B / 3 springs	Pole Ø 406 / D = 540
000 700 461 00046	000700461-46	B / 4 springs	Pole Ø 304 / D = 540

Attachments Typ B, for 2x TENSOREX C+ for parallel installation on rectangular masts

L.-No.	Drawing No.	Back Fitting Type	Dimension (mm)
000 700 461 00002	000700461-02	B / 4 springs	Pole H 300 – 340 x 320 / D = 630
000 700 461 00003	000700461-03	B / 2 springs	Pole H 290 x 290 / D = 540
000 700 461 00004	000700461-04	B / 2 springs	Pole H 340 x 320 / D = 540
000 700 461 00005	000700461-05	B / 3 springs	Pole H 280 x 280 / D = 600
000 700 461 00014	000700461-14	B / 2 springs	Pole H 360 x 360 / D = 540
000 700 461 00051	000700461-51	B / 2 springs	Pole H 340 x 355 / D = 630

SAFETY EQUIPMENT

Content

Voltage Detectors

Electric railway systems around the world are operated with different voltage systems. Mosdorfer Rail can supply voltage detectors for all common voltage systems.

- 15 kV at 16.7 Hz
- 25 kV at 50 Hz
- 1500 V DC
- 3000 V DC
- Voltage supply for trolley lines
  Voltage supply for urban rail systems with third rail

Depending on type, our voltage detectors are suitable for use on railway catenaries and power lines as well as on switchgear.

Voltage Detector KP-Test 5R for Catenaries

The KP-Test 5R 15 kV 16,7 Hz and KP-Test 5R 25 kV 50 Hz capacitive voltage detectors are designed for use on railway catenaries. It indicates the presence of operating voltage when brought into contact with the conductor. For transport separable into two parts.

Technical description:
- Bright LEDs for clear recognition
- Particularly loud, integrated audible signal
- Extensive self-test functions at switch-on
- Contact electrode in hook form with contact pin for optimum contact with the catenary
- For single-phase networks

The KP-Test 5R 15 kV 16,7 Hz is designed and manufactured according DIN VDE 0681, Part 6.

KP-Test 5R 15 kV 16,7 Hz

L.-No.	Version	Marking language	Total length LG (mm)	Transport length LT (mm)	Suitable bag	Carrying bag included
930 310 001	00004 *)	German	4795	2460	B3	No
930 310 001	00005 *)	German	4795	2460	B3	Yes
930 310 001	00020	German	4795	2460	B3	No
930 310 001	00021	German	4795	2460	B3	Yes

KP-Test 5R 25 kV 50 Hz

L.-No.	Version	Marking language	Total length LG (mm)	Transport length LT (mm)	Suitable bag	Carrying bag included
930 300 001	00022	German	4795	2460	B3	No
930 300 001	00024	German	4795	2460	B3	Yes

Voltage Detector KP-Test 5R for Catenaries, divisible

The KP-Test 5R 15 kV 16,7 Hz and KP-Test 5R 15 kV 50 Hz capacitive voltage detector designed for use on railway catenaries. It indicates the presence of operating voltage when brought into contact with the conductor.

The voltage detector can be disassembled into five individual components for transport in service vehicles.

Technical description:
- Bright LEDs for clear recognition
- Particularly loud, integrated audible signal
- Extensive self-test functions at switch-on
- Separable contact electrode in hook form with point-contact for optimum contact with the catenary
- For single-phase networks

The KP-Test 5R 15 kV 16,7 Hz is designed and manufactured according DIN VDE 0681, Part 6

KP-Test 5R 15 kV 16,7 Hz

L.-No.	Version	Marking language	Total length LG (mm)	Transport length LT (mm)	Suitable bag	Carrying bag included
930 310 601	00001 *)	German	4795	1100	B1	No
930 310 601	00002 *)	German	4795	1100	B1	Yes
930 310 601	00025	German	4795	1100	B1	No
930 310 601	00024	German	4795	1100	B1	Yes

**) Versions with DB-approval Ebgw 02.16*

KP-Test 5R 25 kV 50 Hz

L.-No.	Version	Marking language	Total length LG (mm)	Transport length LT (mm)	Suitable bag	Carrying bag included
930 300 601	00001	German	4795	1100	B1	No
930 300 601	00002	German	4795	1100	B1	Yes

Voltage Detector KP-Test 5R DC

The KP-Test 5R DC double-pole voltage detector is designed for use on the catenary systems of DC voltage railways. It indicates the presence of operating voltage when brought into contact with the conductor. With its extensive, integrated self-tests, the KP-test 5R DC voltage detector ensures maximum user safety.

Technical description:

-Double-pole type for the catenary systems of DC voltage railways with nominal voltages between 500 V DC and 4,000 V DC
- Second pole designed with practical magnetic connection to rail (cable length = 6.5 m)
- Hook-type contact electrode with high-quality contact pin for optimum contact
- Self-test at switch-on also checks the connecting cable
- Can be used in rain and snow
- Integrated audible signal for reliable voltage tests even in a noisy environment
- Extremely bright LEDs in clear layout to prevent confusion
- Induced AC voltage signal detection
- Voltage testing possible even with a high proportion of leakage current on disconnected contact wires
- Available separately without insulating pole
- Available separately without insulating pole, but with additional adapters
- Available with convenient carrying case

L.-No.	Version	Marking language	Nominal Voltage DC UN (V)	Transport length LT (mm)	Included insulating poles	Suitable bag
930 350 001	00187	German	650 - 750	2450	2	B3
930 350 001	00172	German	650 - 750	1111	4	B1
930 350 001	00178	German	650 - 750	1111	-	B1
930 350 001	00182	German	1500	2450	2	B3
930 350 001	00199	German	1500	1111	4	B1
930 350 001	00198	German	1500	1111	-	B1
930 350 001	00167	German	3000	2450	2	B3
930 350 001	00100	German	3000	1111	4	B1
930 350 001	00145	German	3000	1111	-	B1

Accessories:

Insulating rods in three-part design. Overall length approx. 5.000 mm
- 624 780 001 - UP – Insulating pole top
- 620 780 001 - PR1 – Insulating pole lower part

Insulating rods in five-part design. Overall length approx. 4.880 mm
- 624 780 002 - UP – Insulating pole top
- 623 929 100 - RP4 - Insulating pole extension 2
- 623 929 001 - RP3 - Insulating pole extension 1
- 623 930 001 - PR2 – Insulating pole lower part

Voltage Detector KP-Test 5R DC Dual

The KP-Test 5R DC dual double-pole voltage detector is similar in design to the KP-Test 5R DC. In addition, this voltage detector can be switched between two nominal voltage ranges in two steps. This allows a larger system range to be covered even when there is a high proportion of leakage current.

The KP-Test 5R DC dual has two selectable voltage steps.
Step 1:
- Selection by briefly pressing the Power-On button.
- LED indicator: 1 x green

Step 2:
- Selection by long pressing the Power-On button.
- LED indicator: 2 x green

By deliberately selecting the voltage level at power-up and the associated self-test, a safe and unambiguous display of the KP-Test 5R DC dual is guaranteed

Technical description:
- Double-pole type for the catenary systems of DC voltage railways with nominal voltages between 500 V DC and 4,000 V DC.
- Two-pole version for catenary systems of DC voltage systems with nominal voltages of 500 to 4,000 V DC.
- Second pole designed as a handy magnet connection to rail (cable length = 6.5 m).
- Switchable voltage range.
- Contact electrode designed as a hook with high-quality contact pin for optimum contact.
- Self-test at power up also checks the connection cable.
- Suitable for precipitation (rain, snow).
- Integrated acoustic signal for reliable voltage testing even in noisy environments.
- Extremely strong light-emitting diodes in a confusion-free arrangement.
- Detection of induced AC signals.
- Voltage test possible even with high leakage current share on disconnected contact wires.
- Available in separate design without insulating bar.
- Available in separate design without insulating bar, but with additional adapters.
- Available in a matching design with insulating rod in three parts (poles RP1 and UP, overall length.
- About 5,000 mm) or in five parts (poles RP2, RP3, RP4 and UP, total length about 4,880mm).
- Available with matching bag.

L.-No.	Version	Marking language	Nominal Voltage DC UN (V)	Transport length LT (mm)	Included insulating poles	Suitable bag	Passende Tasche
930 350 501	00016	German	600	1200	1111	-	B1
930 350 501	00017	German	600	1200	2450	2	B3
930 350 501	00018	German	600	1200	1111	4	B1
930 350 501	00019	German	750	1500	1111	-	B1
930 350 501	00020	German	750	1500	2450	2	B3
930 350 501	00021	German	750	1500	1111	4	B1

Accessories see in Voltage Detector KP-Test 5R DC.

Operating Pole Set, 30 kV

Depending on requirements, the operating rod can be used as a switching rod or insulating rod for switching load-break switches or for inserting insulating protective plates and is suitable for use in systems with nominal voltages up to 30 kV.

Technical description:
The operating rod set consisting of:

- 1 handle
- 1 insulating rod with hand protection and red ring
- Max. 3 extension elements
- 4 bar tops

Shift rod head 900 mm Shift rod head 500 mm Working head / roller lock Universal head
- Max. rod length: 4200 mm
- Max. length of single element: 990 mm
- Suitable for indoor and outdoor use, even when it is raining
- Insulating rods made of glass fiber reinforced polyester tube in white color
- Storage bag with 8 rod compartments

The operating rod set 30 kV can be put together individually from a total of 9 individual rod elements.

L.-No.	Handle S33-HV	Insulating rod S33-IS	Extension I S33-IV	Extension II S33-IV	Extension III S33-IV	Top Hook long S33-SK	Top Hook short S33-SK	Top Roller lock S33-AK	Top Universal lock S33-UK	Transport length (mm)	Max. length (mm)
364172008 - 00001	x	x	x	x	x	x	x	x	x	1000	5020
364 172 008 / 00002	x	x	x			x	x	x	x	1000	4120
364 172 008 / 00003	x	x	x			x	x	x	x	1000	3220
364 172 008 / 00004	x	x				x		x		1000	2320
364 172 008 / 00005	x	x	x			x		x		1000	3220
364 172 008 / 00006	x	x	x	x		x		x		1000	4120
364 172 008 / 00007	x	x	x	x	x	x		x		1000	5020
364 172 008 / 00008	x	x				x	x	x	x	1000	2320

Earthing Poles for Railway Systems

Earthing poles for railway systems are used for connecting railway earthing devices. To do this, the earthing terminals are brought up to the contact wire. These earthing poles are marked with red stripes on a white background. This allows optimum identification of the work site.

Technical description:
- Contact wire earthing terminals held by spindle and cross-pin.
- Receiving head with roller locking device allows the earthing pole to be easily attached / detached from the contact wire earthing terminal.
- Robust construction for use in railway applications.

Telescoping Earthing Poles, two-part

Earthing poles for railway systems, in two-part design. These earthing poles are used mainly for transformers and railway power lines. They are continuously adjustable.

L.-No.	Length range (m)	Pole length extended (mm)	Transport length (mm)	Insulating length (mm)	Weight (kg)
362 744 001	1,8 – 3,0	3500	1800	500	3,8
362 744 744	2,6 – 5,0	5000	2600	500	4,3

Telescoping Earthing Poles, three-parts

Earthing poles for railway systems, in three-piece design. The upper section of this earthing pole is continuously adjustable.
A slider enables the connection between the earthing pole and the contact wire earthing terminal to be locked. The earthing pole can thus be used to mark the work site.

L.-No.	Length range (m)	Pole length extended (mm)	Transport length (mm)	Insulating length (mm)	Weight (kg)
362 745 745	2,0 – 5,0	5080	2000	500	5,2
362 745 002	3,2 – 7,0	7000	3200	500	5,2

Pluggable Earthing Parts, five-parts

Earthing pole for railway systems in five-piece design. Because of the short carrying length, this type is suitable for transport in all common passenger vehicle types.
The connection between the earthing pole and the contact wire earthing terminal can be locked using a slider. The earthing pole can thus be used to mark the work site.

L.-No.	Length range (m)	Pole length extended (mm)	Transport length (mm)	Insulating length (mm)	Weight (kg)
364 784 001	4,9	4892	1100	5,2	Ebgw 01.22

Single-Pole Earthing and short circuit Cables

Fitted on both sides with compression type cable lugs with 30° angled palms and 13 mm mounting hole for M12 connecting screw. The conductor exits on the cable lugs are provided with a bending protection device.

L.-No.	Cable cross Section (mm2)	Max. short-circuit current IK 0,12 s (kA)	Length of Earthing cable	Non protruding
362 138 138	50	36,5	8,5	
362 138 529	50	36,5	12	x
362 138 004	50	36,5	13	

Suspension Hook

For non-protruding suspension of earthing wire

L.-No.	Material
360 453 453	A2

Overview Rail Earth Clamps for Railway Systems

L.-No.	Type	Max. cross section conn. cable (mm2)	Max. short circuit current (kA)	Weight (kg)
363 322 005	R50	50	40 (Ik 0,12s)	2,128

L.-No.	Type	Max. cross section conn. cable (mm2)	Max. short circuit current (kA)	Weight (kg)
364 901 001	R51	70	13,8 (Ik 1s)	5,0

Overview Contact Wire Earth Clamps for Railway Systems

L.-No.	Type	Max. cross section conn. cable (mm2)	Wire size Ø (mm)	Max. short circuit current (kA)	Clamping range (mm)	Clamping width (mm)	Weight (kg)
363 418 003	P50D	150	4,5 - 35	29,6 (Ik 1s)	4,5 - 35	34	0,815

L.-No.	Type	Max. cross section conn. cable (mm2)	Wire size Ø (mm)	Max. short circuit current (kA)	Clamping range (mm)	Clamping width (mm)	Weight (kg)
361 499 001	P51D	50	Ri80 - 150	36,6 (Ik0,12s)	-	30	1,07

L.-No.	Type	Max. cross section conn. cable (mm2)	Wire size Ø (mm)	Max. short circuit current (kA)	Clamping range (mm)	Clamping width (mm)	Weight (kg)
361 499 499	P52D	50	Ri80 - 150	36,5 (Ik0,12s)	-	30	0,942

L.-No.	Type	Max. cross section conn. cable (mm2)	Wire size Ø (mm)	Max. short circuit current (kA)	Clamping range (mm)	Clamping width (mm)	Weight (kg)
362 947 947	P53D	50	Ri80 - 150	23,3 (Ik0,12s)	-	30	1,97

MEASURING TOOLS

Content

Contact Wire Laser Measuring Device

L.-No.	ID-Code	Track gauge *) (mm)	Measuring range, on the stagger (MR) (mm)	Remarks
304 132 001	GLI-7PK	1435	+/- 750	
304 132 002	GLI-7PK.60	1435	+/- 600	
304 132 003	GLM-7.PK	1000	+/- 450	
304 132 004	GLI-7 PK TRVIA.60	1435	+/- 600	Tramway support
304 132 005	GLI-7 PK TRVIA.35	900	+/- 350	Tramway support
304 132 008	GLI-7PK.FI	1524	+/- 600	
304 132 012	GLI-7PK.GB	1435	+/- 750	
304 132 101	GLI-7 PK.L	1435	+/- 750	Light version, measuring of inclination and pole distance
304 132 102	GLI-7 PK.60.L	1435	+/- 600	Light version, measuring of inclination and pole distance

**) Other measuring devices with different track gauges available on request.*

Application:
- Height and stagger measuring
- This measuring device uses a laser rangefinder to measure the height and stagger of the contact wire.
- Some versions can also be used for inclination measurement and for measuring the distance to the mast.

Technical description:
- Laser measures
- No need touching wires
- Used in any weather conditions.
- Accuracy: +/- 10 mm
- Bluetooth Smart 4.0.

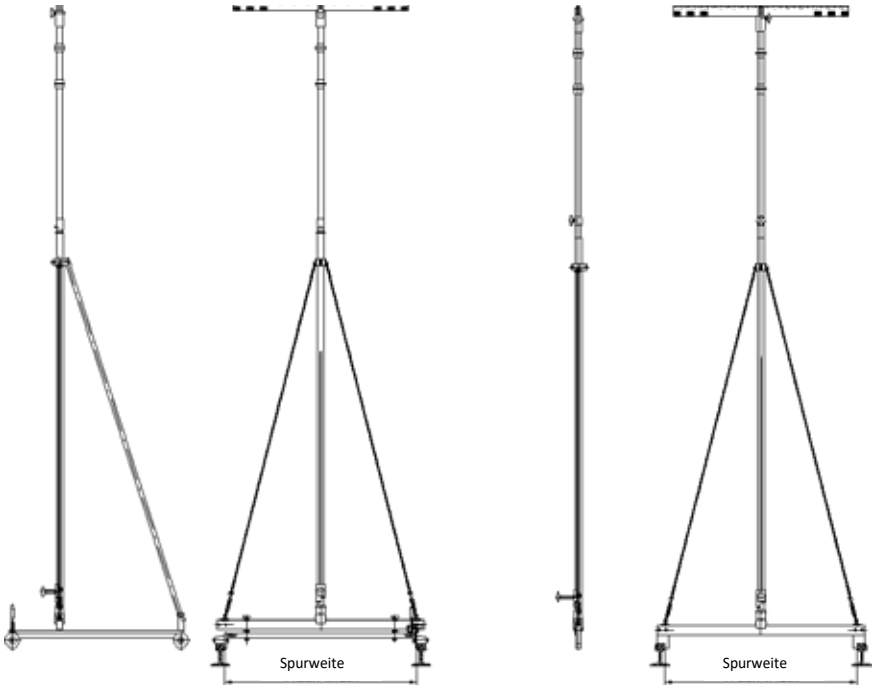
Contact Wire Measuring Device

L.-No.	Description	Track width (mm)	Height, min.. (mm)	Height, max. (mm)	Measuring range (mm)	Transport-ing length (mm)
304 130 003	Differential pressure sensor, mobile	1.435	4.630	6.300	+/- 600	3.000
304 130 130	Differential pressure sensor, mobile	1.435	4.630	6.300	+/- 600	3.000
304 131 131	Differential pressure sensor, stationary	1.435	4.630	6.300	+/- 600	3.000

**) Other measuring devices with different height range and track gauges available on request.*

Application:
- Contact wire measuring
- This unit is used to measure the height and stagger of the contact wire

Technical description:
- Hot-dip galvanised sectional tubular steel supporting bar
- Slotted measuring tube
- Insulating rod with rain insulators
- Plastic surveyor‘s rod
- Movable sub frame (depending on the design)



COMPRESSION AND CUTTING TOOLS








Content

Manual Commpressing Pliers Type 02

Mechanical tools with open design of the compression head. The open design of the compression head allows the placement and removal of the compression pliers directly at the connection to be pressed without removing the compression dies.

L.-No.	Type	Rotatable compression head	Compression force (kN)	Compressible cross sections Cu (mm2)	Compressible cross sections Al (mm2)	Compression dies type	Size (mm)
303 088 088	Primat O2	-	25	6 - 35	16 - 50	O2	370
303 527 527	Primat O2D	360°	25	6 - 35	16 - 50	O2	400

Compressible cross sections:
- Copper up to 35 mm²
- Aluminium up to 50 mm²

Accessories:
- Case for mechanical hand compression tool, PRIMAT 02 and dies
- Holder for mechanical hand compression tool, PRIMAT 02 for clamping the tool into a vice

Manual Commpressing Pliers Type 06/G06

The manual crimping plier is equipped with a C-shaped crimping head that can be rotated through 360°. The telescopic handle is released and tightened by simply turning for infinitely variable length adjustment

L.-No.	Type	Rotatable compression head	Compression force (kN)	Compressible cross sections Cu (mm2)	Compressible cross sections Al (mm2)	Compression dies type	Size (mm)
303 871 002	Primat O6-T	360°	60	6 - 185	16 - 150	O6	540 - 750
303 871 003	Primat GO6-T	360°	60	6 - 240	16 - 185	GO6	550 - 760

Compression Dies Type 02 and 06

L.-No.	Description	Type	Tool code	Compression Width (mm)
303 414 523	Oval Compression Die	O2	8 PO	5
303 109 468	Hexagonal compression die	O2	5	5
303 109 109	Hexagonal compression die	O2	6	5
303 109 110	Hexagonal compression die	O2	8	5
303 109 111	Hexagonal compression die	O2	10	5
303 109 400	Hexagonal compression die	O2	12	5
300 463 464	Oval Compression Die	O6	8 PO	5
300 463 465	Oval Compression Die	O6	10 PO	5
300 463 466	Oval Compression Die	O6	12 PO	5
300 463 467	Oval Compression Die	O6	16 PO	5
300 463 468	Oval Compression Die	O6	18 PO	5
300 463 469	Oval Compression Die	O6	20 PO	5
300 463 470	Oval Compression Die	O6	21 PO	5
300 463 473	Oval Compression Die	O6	25 PO	5
300 438 438	Hexagonal compression die	O6	5	5
300 438 439	Hexagonal compression die	O6	6	5
300 438 441	Hexagonal compression die	O6	8	5
300 438 443	Hexagonal compression die	O6	10	5
300 438 445	Hexagonal compression die	O6	12	5
300 438 446	Hexagonal compression die	O6	13	5
300 438 447	Hexagonal compression die	O6	14	5
300 438 448	Hexagonal compression die	O6	16	5
300 438 449	Hexagonal compression die	O6	18	5
300 438 451	Hexagonal compression die	O6	20	5

For manual compression pliers type O2 and O6 (O6 also for battery- powered compression tool PressMax 6)

Compression Dies Type G06

L.-No.	Description	Type	Tool code	Compression Width (mm)
300 379 001	Oval Compression Die	GO6	10 PO	13
300 378 382	Oval Compression Die	GO6	16 PO	5
300 378 383	Oval Compression Die	GO6	18 PO	5
300 378 384	Oval Compression Die	GO6	20 PO	5
300 385 386	Oval Compression Die	GO6	22 PO	5
300 353 353	Hexagonal compression die	GO6	5	5
300 353 354	Hexagonal compression die	GO6	6	5
300 353 356	Hexagonal compression die	GO6	8	5
300 353 358	Hexagonal compression die	GO6	10	5
300 353 360	Hexagonal compression die	GO6	12	5
300 353 361	Hexagonal compression die	GO6	13	5
300 353 362	Hexagonal compression die	GO6	14	5
300 353 363	Hexagonal compression die	GO6	16	5
300 353 364	Hexagonal compression die	GO6	18	5

For manual compression pliers type GO6-T and battery powered compression tool PressMax 6

Compression Dies Type C6

L.-No.	Description	Type	Tool code	Compression Width (mm)
300 517 201	Oval Compression Die	C6	10 PO	13
300 517 202	Oval Compression Die	C6	16 PO	5
300 517 203	Oval Compression Die	C6	18 PO	5
300 517 204	Oval Compression Die	C6	20 PO	5
300 517 205	Oval Compression Die	C6	22 PO	5
For Copper and Steel Connections				
300 517 001	Hexagonal compression die	C6	5	5
300 517 002	Hexagonal compression die	C6	6	5
300 517 003	Hexagonal compression die	C6	7	5
300 517 004	Hexagonal compression die	C6	8	5
300 517 005	Hexagonal compression die	C6	9	5
300 517 006	Hexagonal compression die	C6	10	5
300 517 007	Hexagonal compression die	C6	11	5
300 517 008	Hexagonal compression die	C6	12	5
300 517 009	Hexagonal compression die	C6	13	5
300 517 010	Hexagonal compression die	C6	14	5
300 517 011	Hexagonal compression die	C6	16	5
300 517 012	Hexagonal compression die	C6	18	5
300 517 013	Hexagonal compression die	C6	20	5
300 517 014	Hexagonal compression die	C6	22	5
300 517 015	Hexagonal compression die	C6	25	5
300 517 016	Hexagonal compression die	C6	28	5
For Aluminium Connections				
300 517 101	Hexagonal compression die	C6	12	7
300 517 102	Hexagonal compression die	C6	14	7
300 517 103	Hexagonal compression die	C6	16	7
300 517 104	Hexagonal compression die	C6	18	7
300 517 105	Hexagonal compression die	C6	20	7
300 517 106	Hexagonal compression die	C6	22	7
300 517 107	Hexagonal compression die	C6	25	7
300 517 108	Hexagonal compression die	C6	27	7

For battery-powered compression tool PressMax 6-C

Compression Dies Type C13

L.-No.	Description	Type	Tool code	Compression Width (mm)
300 513 008	Hexagonal Compression Die	C13	12	14
300 513 010	Hexagonal Compression Die	C13	14	14
300 513 011	Hexagonal Compression Die	C13	16	14
300 513 012	Hexagonal Compression Die	C13	18	14
300 513 013	Hexagonal Compression Die	C13	20	14
300 513 014	Hexagonal Compression Die	C13	22	14
300 513 015	Hexagonal Compression Die	C13	25	14
300 514 009	Hexagonal Compression Die	C13	28	14
300 513 017	Hexagonal Compression Die	C13	32	5
300 514 011	Hexagonal Compression Die	C13	34	7

For battery-powered compression tool PressMax 14-A

Hydraulic Compression Head Size III, 850 bar

L.-No.	Type	Operating Pressure (bar)	Nominal compression force (kN)	Compressible cross sections Cu (mm2)	Compressible cross sections Al (mm2)	Stroke (mm)	Accessory
305 678 007	Size III	850	240	16 - 500	25 - 630	22,5	
305 678 009	Sizee III	850	240	16 - 500	25 - 630	22,5	With hook

Hydraulic tool head 850 bar with oil-loss-free coupling plug for two-stage high-pressure pumps ZHP, electrohydraulic high-pressure pump EHP and battery-operated high-pressure pump AHP with hose connection (coupling sleeve).

Compression Dies Size III

For hydraulic compression head size III

Compression Dies for C- and E-Camps

L.-No.	Description	Type	Tool code	Compression Width (mm)
302 131 131	Compression die for compressing	III	DB 3	44
302 246 246	Compression die for detaching	III	DB 3-L	44

Compression Dies for revited contact wire Splices

L.-No.	Description	Size	Tool Code
302 346 346	Compression die for riveting	III	DB 4-N / UIC-107
302 345 345	Compression die for detaching	III	DB 4-L / UIC-107

Compression Dies for Wire Joints

L.-No.	Description	Type	Tool code	Compression Width (mm)
300 608 004	Hexagonal compression die	III	13	14
300 608 005	Hexagonal compression die	III	14	14
300 608 006	Hexagonal compression die	III	15	14
300 608 007	Hexagonal compression die	III	16	14
300 608 008	Hexagonal compression die	III	17	14
300 608 009	Hexagonal compression die	III	18	14
300 608 010	Hexagonal compression die	III	19	14
300 608 011	Hexagonal compression die	III	20	14
300 608 012	Hexagonal compression die	III	21	14
300 608 014	Hexagonal compression die	III	22	14
300 608 015	Hexagonal compression die	III	23	14
300 608 016	Hexagonal compression die	III	25	14
300 608 018	Hexagonal compression die	III	28	14
300 608 019	Hexagonal compression die	III	30	17
300 608 021	Hexagonal compression die	III	34	17
300 608 022	Hexagonal compression die	III	38	17
300 608 023	Hexagonal compression die	III	42	17
300 608 024	Hexagonal compression die	III	44	17

Two-stage High Pressure Pump, 850 bar

L.-No.	Description	Operating Pressure (bar)	Nominal compression force (kN)	Hydraulic oil (cm2)	Hose included, length (m)	Remarks
305 799 002	Two-stage high pressure pump	850	240	600	3	Operates in any position
Spare Parts						
300 772 776	Hose, 3m	850			3	
300 772 656	Hose, 4m	850			4	
300 772 312	Hose, 8m	850			8	

The high-pressure unit is mounted on a galvanized U-frame. The valve body is made of an aluminium alloy, so the pump has a low weight. The high-pressure hose is equipped with an oil-loss-free coupling sleeve for connecting the compression head. The pump operates at rapid speed until the beginning of the compression phase, i.e. less strokes are necessary. A pressure relief valve protects the compression head from overloading.

Electro-hydraulic High Pressure Pump, 850 bar

L.-No.	Description	Operating Pressure (bar)	Nominal compression force (kN)	Hydraulic oil (cm2)	Hose included, length (m)	Remarks
305 853 012	EHP, electro-hydraulic high pressure pump	850	240	650	230	3
305 853 013	EHP, electro-hydraulic high pressure pump	850	240	650	230	4
305 853 016	EHP, electro-hydraulic high pressure pump	850	240	650	230	8
Spare Parts						
300 772 776	Hose, 3m	850				3
300 772 656	Hose, 4m	850				4
300 772 312	Hose, 8m	850				8

The high-pressure pump is installed in a handy carrying case. The well-proven double-hose system (supply and return) with control valve and oil-loss-free coupling sleeve for connecting a compression head completes the device. An overpressure valve protects the high-pressure pump against overload. The electric drive motor has a power consumption of 500 W. The power cable, which is suitable for use on construction sites, is 5 m long.

Pressmax 6

The PressMax 6 has an ideal power to weight ratio for crimping jobs of up to 240 mm² according to DIN.
Especially the energy sector values their ergonomic design and the use of standard dies

L.-No.	Description	Crimping force	Stroke	Weight approx. *)	Dimensions
305 909 022	PressMax 6	60 kN	15 mm	3,1 kg	365 x 79 x 255 mm

*) *without battery*

Benefits:
- Safe one-hand operation thanks to light-weight and well- balanced design with non-slip housing.
- Safe crimping even in confined spaces by narrow, rotatable crimping head with LED for lighting the working area.
- Standard spring and pin crimping dies.
- Very short crimping cycles by optimized 2-step hydraulic system.
- The accessories are interchangeable within the battery-operated hydraulic tool series from Mosdorfer Rail.

Scope of delivery:
- Battery operated crimping tool PressMax 6
- Lithium-ion battery IPP-30
- Battery charger IMC-1 (AC)
- Carrying strap and transportation case

Crimping range:
- Cu/Al accord. to DIN 48083
- ACSR
- Pre-Rounding

- Cu: 10 – 240 mm²
- Al: 10 – 240 mm²
- Al: 16 – 120 mm²
- St: 2,5 – 25 mm²
- SE: 35 – 300 mm²
- SM: 10 – 240 mm²

Pressmax 6-C

The PressMax 6 has an ideal power to weight ratio for crimping jobs of up to 300 mm² according to DIN.
Especially industry and the energy sector values their ergonomic design and the use of standard dies.

L.-No.	Description	Crimping force	Stroke	Weight approx. *)	Dimensions
305 909 023	PressMax 6-C	60 kN	15 mm	3,4 kg	350 x 79 x 265 mm

*) *without battery*

Benefits:
- Safe one-hand operation thanks to light-weight and well- balanced design with non-slip housing.
- Safe crimping even in confined spaces by narrow, rotatable crimping head with LED for lighting the working area.
- Standard 6-t C-shaped
- Very short crimping cycles by optimized 2-step hydraulic system.
- The accessories are interchangeable within the battery-operated hydraulic tool series from Mosdorfer Rail.

Scope of delivery:
- Battery operated crimping tool PressMax 6-C
- Lithium-ion battery IPP-30
- Battery charger IMC-1 (AC)
- Carrying strip and transportation

Crimping range:
- Cu/Al accord. to DIN 48083
- ACSR
- Pre-Rounding

- Cu: 10 – 300 mm²
- Al: 10 – 300 mm²
- Al: 16 – 120 mm²
- St: 2,5 – 25 mm²
- SE: 35 – 300 mm²
- SM: 10 – 240 mm²

Pressmax 14-A

Der PressMax 14-A bietet ein optimales Leistungsgewicht und mit 14t die größte Presskraft im Bereich der akkubetriebenen Presswerkzeuge. In der Industrie und der Energiewirtschaft werden die ausgewogene Ergonomie und die Aufnahme von Standard-Presseinsätzen geschätzt

L.-No.	Description	Crimping force	Stroke	Weight approx. *)	Dimensions
305 909 024	PressMax 14-A	140 kN	22 mm	4,7 kg	365 x 76 x 265 mm

**) without battery*

Benefits:
- Safe one-hand operation thanks to light-weight and well- balanced design with non-slip housing.
- Safe crimping even in confined spaces by narrow, rotatable crimping head with LED for lighting the working area.
- Very short crimping cycles by optimized 2-step hydraulic system.
- The accessories are interchangeable within the battery-operated hydraulic tool series from Mosdorfer Rail.

Scope of delivery:
- Battery operated crimping tool PressMax 14-A
- Lithium-ion battery IPP-30
- Battery charger IMC-1 (AC)
- Carrying strip and transportation case

Crimping range:
- Cu/Al accord. to DIN 48083
- ACSR
- Vorrunden

- Cu: 10 – 400 mm²
- Al: 10 – 400 mm²
- Al: 16 – 340 mm²
- St: 2,5 – 40 mm²
- SE: 35 – 300 mm²
- SM: 10 – 300 mm²

RS 5

For cutting Cu- and Al-cable of up to Ø50 mm, e.g. NAYY 4 x 185 mm² and single-stranded Cu up to 630 mm²; for industry, energy supply and utility companies, service providers, as well as in telecommunications and wind energy industry.

Cutting ranges	Ø mm	Cable up to
Cu Strand	50 mm	630 mm²
Al Strand	50 mm	800 mm²
Cu / Al Round Material	*)	
Cu / Al Conductor fine stranded	-	
Cu / Al Conductor very fine stranded	50 mm	630 mm²
ACSR	50 mm	800 mm², 4x 185 mm²

**) on request*

Benefits:
- Excellent cutting pattern due to circular cut.
- Improved, shock-resistant housing with ergonomically arranged control elements.
- The robust, well concerted motor provides short cutting time.
- The low-weight tool (2.1 kg) allows a good ergonomic one-hand operation.
- The accessories are interchangeable in battery-operated hydraulic tool series of Mosdorfer Rail.

Technical data:
- Cutting force: 25 kN
- Opening width: 50 mm
- Weight (without battery): 2,1 kg
- Dimensions: 110 x 190 x 365 mm
- Article no.: 305 911 003

Scope of delivery:
- Lithium-ion battery
- IPP-30 Charger
- Transportation Case RS 5

Spare Parts:
- Cutting blades

RS 5-F

Cuts fine and very fine-stranded conductors (class 5 and 6 according to DIN VDE 0295); for energy supply
and utility companies, service providers, as well as in telecommunications and wind energy industry.

Cutting ranges	Ø mm	Cable up to
Cu Strand	*)	630 mm²
Al Strand	*)	800 mm²
Cu / Al Round Material	-	
Cu / Al Conductor fine stranded	50 mm	
Cu / Al Conductor very fine stranded	50 mm	
ACSR	-	
Cu Energy Cable	*)	630 mm²
Al Energy Cable	*)	800 mm², 4x 185 mm²

**) on request*

Benefits:
- Cuts very fine-stranded conductors up to 630 mm² Cu and Al.
- Excellent cutting pattern due to circular cut.
- Improved, shock-resistant housing with ergonomically arranged control elements.
- The robust, well concerted motor provides short cutting time.
- The low-weight tool (2.1 kg) allows a good ergonomic one-hand operation.
- The accessories are interchangeable in battery-operated hydraulic tool series of Mosdorfer Rail.

Technical data:
- Cutting force: 25 kN
- Opening width: 50 mm
- Weight (without battery): 2,1 kg
- Dimensions: 110 x 190 x 365 mm
- Article no.: 304 634 003

Scope of delivery:
- RS 5-F mit Lithium-Ionen-Akku IPP-30
- Ladegerät
- Transportkoffer RS 5

Spare Parts:
- Cutting blades

TOOLS

Content

Come-Along Clamps

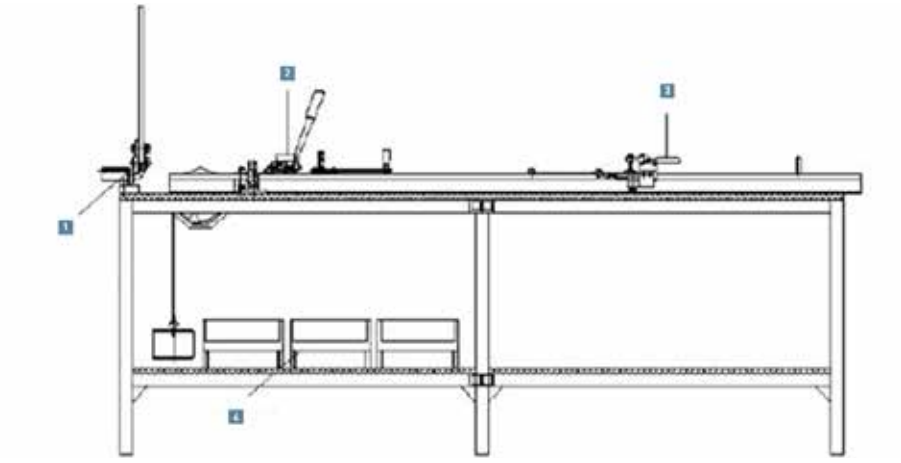
L.-No.	Conductor cross section (mm2)	Diameter of conductor (mm)	Max. traction (kN)
330 656 002	6 - 35	3 - 9	10
330 656 003	16 - 70	4 - 12	17
330 656 004	50 - 150	6 - 18	30
330 656 005	90 - 400	10 - 28	35

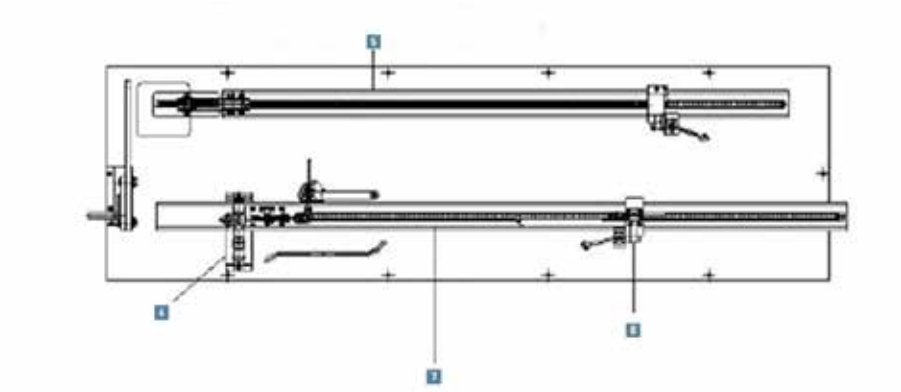
Application:
- Installation of cables
- For copper and steel II wires with a tensile strength of up to 650 N/mm² according DIN 48201

Dropper Mounting Bench

L.-No.	ID-Code	Application	Wire cross section (mm)	Test equipment included
305 859 102	MM 305.859.002.2	Dropper with loop	25	-
625 015 016	MM 625.015Y016	Simple dropper without loop	25	-
305 859 001	MM 305.859V1	Droppers with loop	16	-
625 035 095	MM 625.35.95	Droppers with loop	16	Yes

Application:
- Dropper prefabrication
- The dropper table is used to prefabricate complete PFISTERER droppers in various lengths and with different components and wires





1 - Plate Shears
2 - Push Comp. Sleeves
3 - Fixing Clamp Cable
4 - Boxes
5 - Test Equipment (optional)
6 - Press Comp. Sleeves
7 - Measurement Support
8 - Regulator Cable Cutting

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