

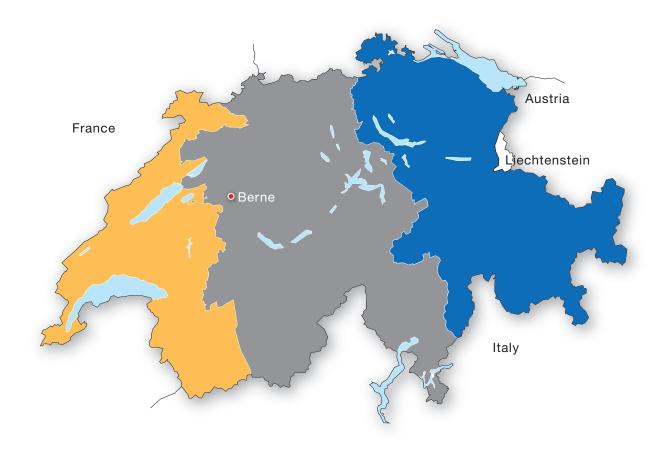
Earthing | Lightning protection | Overvoltage protection

# Earthing and equipotential in tunnel construction

Edition 2020



#### **Contacts in Switzerland**





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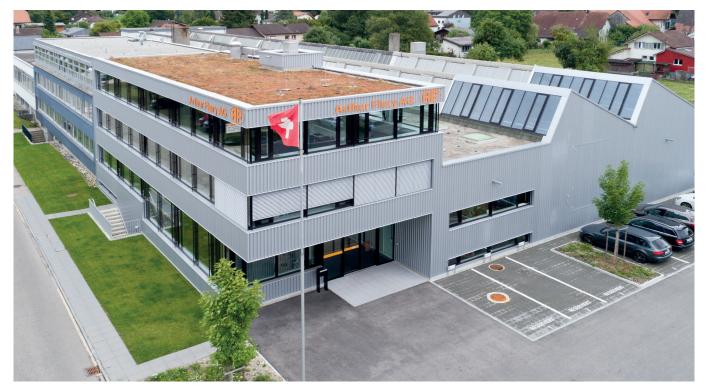


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## The enterprise



Arthur Flury AG is a worldwide active Swiss enterprise, with a leading position in the production of electromechanical components.

In railway technology, energy distribution, lightning protection for buildings and in earthing systems, our products fulfil the highest requirements. It is essential to assure full functionality and a proper protection of the installations.

We therefore focus our business activity on the quality of our products and service and on the customer satisfaction.



#### Earthing and equipotential in tunnel construction

Arthur Flury AG is an internationally active company with a leading position in the design and manufacture of components for electrical connections.

Thanks to our lengthy experience, our extensive practical knowledge and our consequent concentration on components for electrical connections, we are able to adapt to the customer's individual needs and to optimise our products con stantly in close collaboration with our clients.

The production engineering of cold forming, punching and machining of copper alloys are decisive factors to be able to produce light and conductive components in perfect quality.

The overhead line materials from Arthur Flury AG are used in more than 40 countries. Tram, metro and suburban railways of the world's largest metropolises as well as regional and national railways rely on the quality of our products and services.

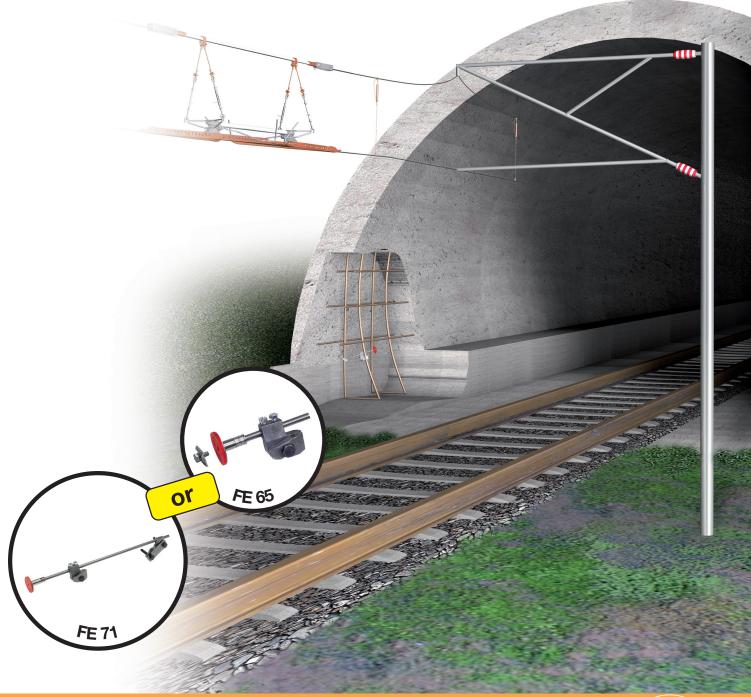
In long lasting development work Arthur Flury AG has created products and accessories in light weight construction which

comply with the requirements for optimal running of trolley, tram and normal railway. In addition they are optimally adapted to the age of the high-speed routes. Thanks to our extensive knowledge and modular production concepts we are able to offer each railway the optimal solution.

Additionally, Arthur Flury AG contributes to the development of earthing systems in tunnel construction projects as well as grounding and equipotential bonding systems. Over many years our reference list includes all leading tunnel construction, plumbing and electrical installation companies. The earthing and lightning protection system from Arthur Flury AG includes all system components for the holistic protection of people, buildings and the electrotechnical infrastructure. Our products comply with the highest technical standards. For example lightning protection components for lightning surge currents up to 100kA (10/350; class H) and the foundation earthing material is checked for short-circuit current.

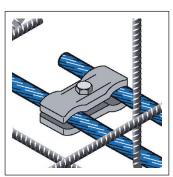






# FE 41 Parallel clamp

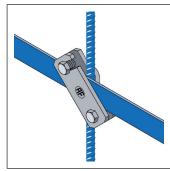




Article No.	E-Number				mm			
281.085.000	156 940 130		St	M10x40	6-22			
281.085.010	156 940 770		St	M10x60	10-26			
281.085.020	156 940 780		St	M10x40	6-12/22-26			
281.108.000	156 940 590	ok	InoxA4	M10x40	6-22			

## FE 43 Cross clamp, 2-parts





#### Characteristics

Cross connector 30x3mm, suitable for parallel connections up to 50x3mm

Cross connector 50x3mm, suitable for parallel connections up to 80x3mm

Article No.	E-Number	H				mm Ø	mm		
281.095.000	156 940 110			St	M10x40	6-22	30x3		
281.103.000	156 940 050			St	M10x60	6-26	30x3		
281.109.000	156 940 620			St	M10x80	6-28	30x3		
281.096.000	156 940 140			St	M10x40	6-22	50x3		
281.096.010	156 940 640			St	M10x60	6-26	50x3		
280.000.002	156 940 270	Н	ok	InoxA4	M10x40	6-22	30x3	a)	
270.049.000	156 941 270	Н	ok	InoxA4	M10x40	6-22	50x3	a)	

# FE 44 Cross clamp, 3-parts





Article No.	E-Number					mm Ø	mm		
281.097.000	156 940 150			St	M10x60	6-22	30x3		
281.107.000	156 940 580			St	M10x100	6-26	30x3		
281.098.000	156 940 160			St	M10x60	6-22	50x3		
280.000.001	156 940 280	Н	ok	InoxA4	M10x60	6-22	30x3		
280.000.003	156 940 790		ok	InoxA4	M10x60	6-22	50x3		

## ■ FE 45 Around cross clamp





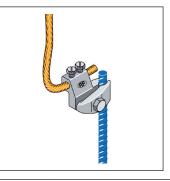
**Legend** a) With clamp board

Article No.	E-Number				mm Ø			
261.068.000	156 830 280		St	M10	8-16			
261.069.000	156 830 290		St	M10	8-16	a)		
260.072.000	156 830 180	ok	InoxA4	M10	8-16			
260.073.000	156 830 190	ok	InoxA4	M10	8-16	a)		

# FE 30 Connection clamp



281.077.037



M10x40

#### **Characteristics**

Made of malleable cast iron

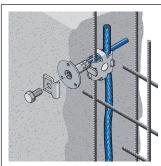
Article No. E-Numb	er		mm	mm 1	mm 1
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St

## FE 69 Connection set with around cross clamp

156 940 170





#### Content

10-22

max.10

- 1 Connection part (type FE 27)
- 1 Around cross clamp (type FE 45)
- 3 Clout nails made of stainless steel

10-22

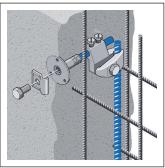
1 Connection plate and screw (type FE 85)

Article No.	E-Number	kA/s \$			mm			
261.050.000	156 940 030	6	InoxA4	M10x25	8-16			



## FE 65 Connection set with clamp



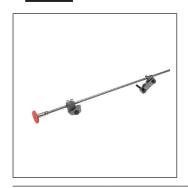


#### Content

- 1 Connection part (type FE 27)
- 1 Connection clamp (type FE 30)
- 3 Clout nails made of stainless steel
- 1 Connection plate and screw (type FE 85)

Article No.	E-Number	kA/s (\$)			mm	mm a  ←→		
281.075.037	156 940 200	6	InoxA4	M10x25	10-22	180		

## ■ FE 71 Connection set with cross clamp



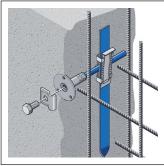
#### Content

- 1 Connection part (type FE 27)
- 1 Connection clamp (type FE 30)
- 1 cross clamp, 2 parts (type FE 43)

Article No. E-Nu	mber $\stackrel{\text{\tiny kA/s}}{=}$			The state of the s	mm a  ←→		
281.111.005 156 9	02 080	InoxA4	M10x25	10-22	435		
281.111.000 156 9	02 180	InoxA4	M10x25	10-22	1035		

# FE 66 Connection set with wedge connector



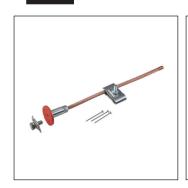


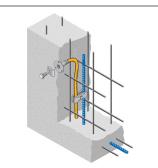
#### Content

- 1 Connection part (type FE 27)
- 1 wedge connector (type FE 60)
- 3 Clout nails made of stainless steel
- 1 Connection plate and screw (type FE 85)

Article No.	E-Number	kA/s (\$)			mm ‡	mm  ← a		
281.080.564	156 940 210	6	InoxA4	M10x25	30x3	180		

## FE 70 Connection set with copper cable flexible





#### Content

- 1 Connection set with Cu-corde (type FE 70)
- 1 Connection plate and screw (type FE 85)
- 1 Parallel clamp (type FE 41)
- 3 Clout nails made of stainless steel

Article No.	E-Number	kA/s (\$)			mm²	mm	mm  ← a		
260.074.000	156 940 040	6	InoxA4	M10x25	1x50	6-22	350		
260.074.051	156 940 070	6	InoxA4	M10x25	1x50	6-22	500		



# FE 85 Connection plate and screw





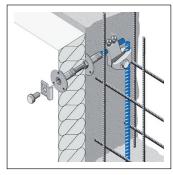
#### Legend

a) for the connection of 2 conductorsb) without screw and washer

Article No.	E-Number					mm Ø			
285.099.025	156 831 650	Н	ok	InoxA4	M10x25	6-10			
260.071.002	156 831 660	Н	ok	InoxA4	M10x25	6-10	a)		
260.071.001	156 831 670	Н	ok	InoxA4	M10x25	6-10	a)+b)		

## FE 31 Extension for connection





#### Characteristics

Without connection plate and screw (type FE 85).

Article No.	E-Number		kA/s 🕏			mm a  ←→	<b>*</b>		
281.089.302	156 940 290	Н	6	ok	InoxA4	285	M10		

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## The whole program ONLINE

On www.aflury.ch you can find all information concerning our products and services. You always have access to our newest status of our product data, technical information, installation instructions and pictures.

On our website, you will find any information about activities, trainings and exhibitions.

Have a look at our website www.aflury.ch.

