

CLIC FASTENING SYSTEM for cables and pipes



clic[®]
product
catalogue
2020

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efco
.SWISS

smart fixing

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THE INTERNATIONAL CERTIFICATION NETWORK

CERTIFICATE

SQS and IQNet Partner hereby states that the organization

EFCO Fixing Technology Ltd
Grabenstrasse 1
8606 Nänikon
Switzerland

for the following scope and type of activities

Entire Company
Fixing Technology

has implemented and maintains a

Management System

which fulfills the requirements of the following standard(s)

ISO 9001:2015 / Quality Management System

for the validity date, please refer to the original certificate issued by SQS*

Scope No(s): 19, 29

Issued on: 2017-12-19

Validity date: 2020-12-18

Registration Number: CH-12840



Alex Stoichitoiu
President of IQNet

Roland Glauser
CEO SQS



IQNet Partners:**

AENOR Spain AFNOR Certification France APCER Portugal CCC Cyprus CISQ Italy
 CQC China CQM China CQS Czech Republic Cro Cert Croatia DQS Holding GmbH Germany FCAV Brazil
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 IRAM Argentina JQA Japan KFQ Korea MIRTEC Greece MSZT Hungary Nemko AS Norway NSAI Ireland PCBC Poland
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 SQS Switzerland SRAC Romania TEST St Petersburg Russia TSE Turkey Vinçotte Belgium YUQS Serbia
 IQNet is represented in the USA by: AFNOR Certification, CISQ, DQS Holding GmbH and NSAI Inc.

* This attestation is directly linked to the IQNet Partner's original certificate and shall not be used as a stand-alone document.

** The list of IQNet partners is valid at the time of issue of this certificate. Updated information is available under www.iqnet-certification.com

SQS herewith certifies that the company named below has a management system which meets the requirements of the standard specified below.

1



EFCO Fixing Technology Ltd
Grabenstrasse 1
8606 Nänikon
Switzerland

Scope of certification

Entire Company

Field of activity

Fixing Technology

Normative base

ISO 9001:2015

Quality Management System

Scope(s) 19, 29

Validity 19.12.2017 – 18.12.2020
Issue 19.12.2017

Reg. no. 12840

X. Edelman, President SQS

R. Glauser, CEO SQS



sqs.ch



Swiss Association for Quality and Management Systems SQS
Bernstrasse 103, 3052 Zollikofen, Switzerland



Productcertificaat K5036/03



Uitgegeven 2018-08-15

Vervangt 5036/02

Pagina 1 van 2

1

Beugels van kunststof bestemd voor waterleidingbuizen

VERKLARING VAN KIWA

Met dit, conform het Kiwa-Reglement voor Certificatie, afgegeven productcertificaat verklaart Kiwa dat het gerechtvaardigd vertrouwen bestaat dat de door

EFCO Befestigungstechnik AG

geleverde producten, die zijn gespecificeerd in dit certificaat en voorzien van het onder "Merken" aangegeven Kiwa®-keurmerk, bij aflevering voldoen aan Kiwa-beoordelingsrichtlijn BRL-K506 "Beugels van kunststof bestemd voor drinkwaterbuizen van koper of kunststof" d.d. 01-02-2012.

Luc Leroy
Kiwa

288171015

Openbaarmaking van het certificaat is toegestaan.

Advies: raadpleeg www.kiwa.nl om na te gaan of dit certificaat geldig is.

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**Certificatieproces
bestaat uit initiële en
periodieke beoordeling
van:**

- kwaliteitsstelsel
- product



File E234162
Project 02CA9135

2003-08-20

REPORT

On

POSITIONING DEVICES

EGLI FISCHER & CO KG
Zurich, Switzerland

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(Richtlinie 2015/863/EU)

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RoHS-Declaration of Conformity

(Directive 2015/863/EU)

Hereby EFCO Fixing Technology Ltd confirms that to its knowledge all products (unless otherwise expressly signed) sold by EFCO Fixing Technology Ltd fulfill the requirements of the EU directive 2015/863/EU. This statement is based on information provided by our suppliers and is accurate to the best of our knowledge.

Déclaration de conformité RoHS

(Directive 2015/863/UE)

EFCO Technique de Fixation SA confirme par la présente qu'à sa connaissance actuelle, tous les produits vendus par EFCO Technique de Fixation SA (sauf mention contraire expresse) sont conformes à la Directive 2015/863/EU. Cette déclaration est basée sur les informations fournies par nos fournisseurs et a été préparée en bonne conscience.

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(Direttiva 2015/863/UE)

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EFCO Befestigungstechnik AG

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Thomas Doppelbauer
(Head of Q-Management)

Nänikon, 2018-04-12

Declaration of Conformity REACH

Regulation (EC) No. 1907/2006 regulates the registration, evaluation, authorisation and restriction of chemical substances (REACH).

EFCO Befestigungstechnik AG is a "supplier of articles" within the meaning of the Reach Regulation.

Our products are regarded as articles and not as substances or preparations and are therefore not subject to registration. Obligations arising from the manufacture and placing on the market of substances, chemicals for registration (ECHA) are not applicable to us.

The raw materials used are either not subject to registration or are registered by our suppliers.

As far as we know today, our products do not contain any of the "substances of very high concern" (SVHC) above the permissible limit value according to the candidate list of the European Chemicals Agency ECHA (<https://echa.europa.eu/de/candidate-list-table>).

Where relevant, EFCO Befestigungstechnik AG provides safety data sheets in accordance with Art. 31.

Hereby EFCO Fixing Technology Ltd confirms that to its knowledge all products (unless otherwise expressly signed) sold by EFCO Fixing Technology Ltd fulfill the requirements of the EU directive 2015/863/EU. This statement is based on information provided by our suppliers and is accurate to the best of our knowledge.

EFCO Fixing technology Ltd

Grabenstrasse 1

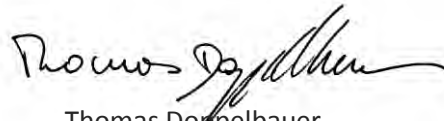
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Thomas Doppelbauer

(Head of Q-Management)

Nänikon, 2019-10-21

Do it the professional way

Let us explain, how these days pipes and cables are efficiently mounted. CLIC opens a vast variety of clamping opportunities to you, thanks to a unique, high-quality fastening system.



CLIC, the system

Continuously improved since 1975, CLIC has proven itself millions of times to keep pipes and cables where they are meant to stay.

The CLIC System covers a vast variety of applications due to its flexibility. It comprises all components needed by a professional to mount pipes and cables.

Next to the hardware, the CLIC System includes the service of an experienced engineer to assist you in all your planning requirements. An extensive experience in various markets and applications around the globe, plus a development division as a system backbone, allow solutions in collaboration with engineers, architects, structural, civil engineering, aircraft engineering and many more highly professional fields.

The CLIC is the proven solution to fasten cable conduits and pipes. It reduces the costs by up to 70 percent by means of saving installation time.

The smart solution for elaborate tasks carried out by professionals

For installations with high demands, public areas or infrastructural buildings, the qualities of CLIC and CLIC TOP are especially recommended due to the high mechanical capacity, the excellent impact and chemical resistance and temperature stability.

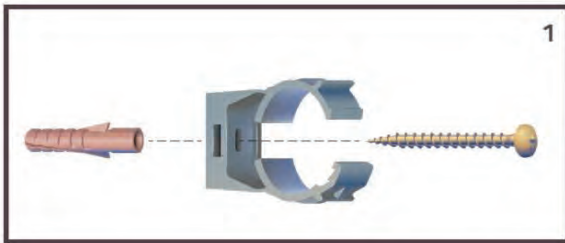
The best solution for highest demands

CLIC TOP covers the increasing demand for fastening points in harsh environments. In many road and train tunnels leaky (radiation) cables, providing signals for radio and mobile telecommunications systems, are exposed to various corrupting environmental impacts such as chemicals, water, variation in temperature etc. CLIC TOP products can take it all and keep pipes and cables in place.

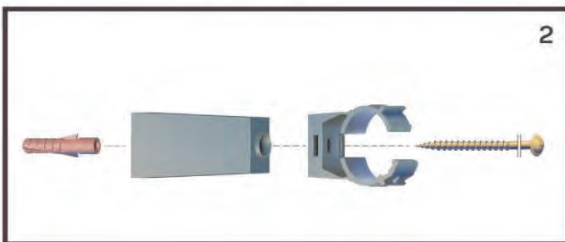
The CLIC technology is protected by Swiss and international patents held by EFCO Fixing Technology Ltd (EFCO). Trademarks: all product and brand names mentioned in this publication are trademarks or registered trademarks of EFCO or of the respective owner. CLIC, DELTA and TILCA in particular are internationally registered EFCO trademarks. Illustrations are owned by EFCO or reproduced by kind courtesy of their owners.

CLIC 8 to 127 mm diameter Mounting with system

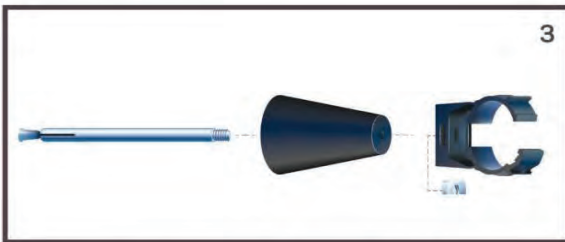
CLIC is more than just a pipe clamp: CLIC is a comprehensive mounting system with perfectly matching parts that can be used separately or combined into customized pre-assembled sets.



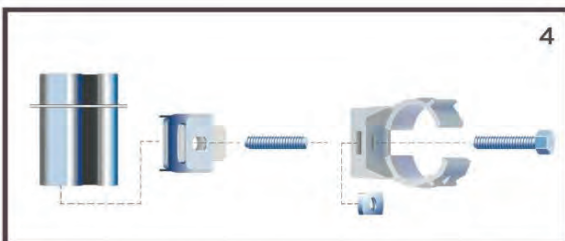
1
Installation with wood screw and DELTA nylon plug.
Surfaces: Masonry, Concrete



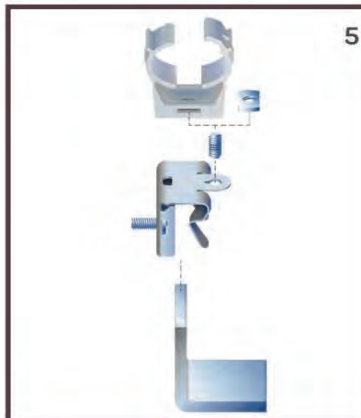
2
Installation with CLIC spacer, round-head wood screw with pressed-on washer and DELTA nylon plug.
Surfaces: Masonry, Concrete



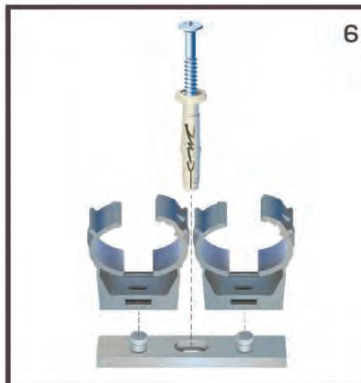
3
Installation with CLIC round spacer, TILCA fire-resisting anchor M6 and CLIC flange. Stainless steel 1.4529 on demand.
Surface: Concrete



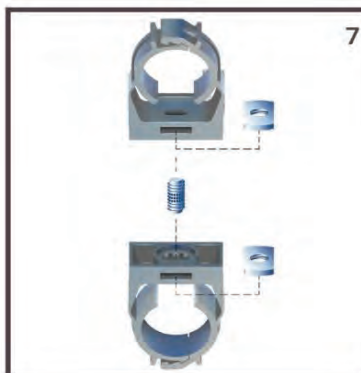
4
Installation with CLIC SLICK strut nut M6, CLIC flange and a threaded stud M6.
Surface: Strut 41×41 and 41×21mm



5
Installation with CLIC hammer on spring steel clamp, CLIC flange and a threaded stud M6
Surface: Steel beam



6
Installation of two CLIC onto base plate fixed with TILCA nail-in plug.
Surfaces: Masonry, Concrete



7
Installation CLIC to CLIC with threaded stud and two CLIC flanges.

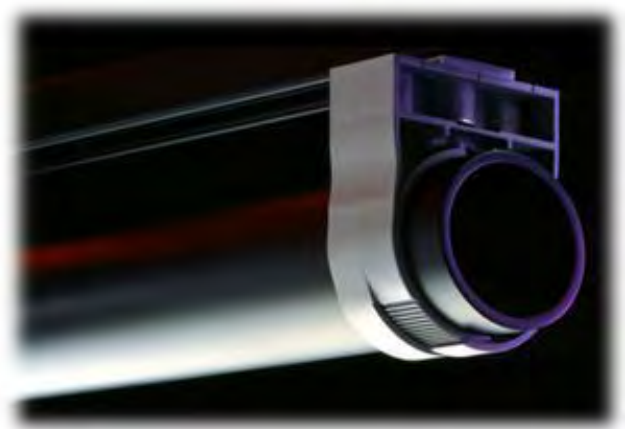
CLIC TOP

Plastic pipe clamps

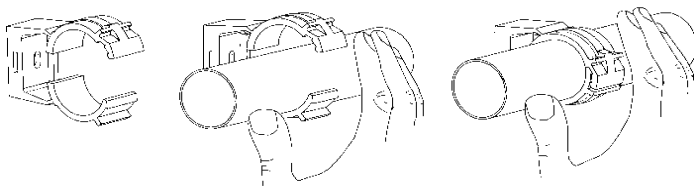
For highest demands: the self locking pipe clamps CLIC TOP

Clamping range 8 to 127 mm (0.295" to 5")

- The solution in a demanding environment.
- For indoor and outdoor applications
- Applicable for dynamic loads
- Material: high quality polyamide
- UV-stabilized: 5 times better than PA6/PA66
- Service temperature -40°C to +150 °C
- Very low moisture absorption
- High chemical resistance
- Listed / approved by UL
- Halogen free as per IEC-Standard 754-2
- Easy to install



3



Simply mount CLIC, push pipe in by hand, grips and locks by applying slight pressure.



UV
Resistant



CLIC is a registered trade mark of Egli, Fischer & Co. Ltd

References

Proven reliability under toughest conditions

The CLIC System is in operation all over the world and is evidence for the well known Swiss quality. CLIC convinces wherever standard or special requirements emerge.

Characteristics such as non-corroding material, safety – also in case of fire – the ease and efficiency of installation more than satisfy the needs of professionals in the tunnelling business. Exposure to chemicals, UV radiation and weather ascendencies, as well as submersion in seawater will not harm your installation. CLIC covers special requirements in nuclear power plants, waste water facilities, shipbuilding or in the aircraft industries.



High-speed tunnelling / Tunnelling

With a route length of 57 km, the Gotthard Base Tunnel in Switzerland is the world's longest rail tunnel. Multiple fastening solutions with our CLIC system are applied to keep pipes and cables in place.

Tens of thousands CLIC fastening points around the world guarantee safety and durability in more than 10,000 km of tunnels around the world in harshest environments.

MRT systems in Europe, Asia, USA, and Australia use the CLIC System to fasten leaky cables to ensure communications for passengers as well as in case of emergency for fire brigade, ambulance and police etc. Examples are Singapore, Hong Kong, Bangkok, Hanover, Vienna, Moscow, London, Los Angeles, Kuala Lumpur, Chengdu, Guangzhou-Foshan Metro etc.



Leaky cable in road tunnels

There exists almost no harsher environment than in road tunnels. Exhaust fumes contain all kinds of aggressive chemicals, temperature ranges from over 60 degr. C, water, fog, mist, dust and many more factors are found in this environment.

The long life span of the CLIC system has been proven in this kind of environment: at a renovation of the Schöneich road tunnel (Switzerland) the cables had to be replaced by new ones with better electrical characteristics. After more than 25 years of exposure only 30% of the CLIC needed to be replaced.



Corrosion-resistant and fire-proof

Stainless steel, seawater and electrical conductivity are known as being far from best friends. Due to non-conductive and non-corroding properties, the CLIC System has been selected as one of the best solutions from various ship-yards in Taiwan, France, Norway, and Korea to fasten the electrical cables on their ocean vessels.



Technical data sheet

clic® top 8 - 127 mm

Application areas

Outdoor installation
 Chemical industry in harsh environment
 Electrical installations in tunnels (cable/conduits)
 Sanitary installations of all kinds
 Swimming pools
 Switching cabinets

Features

Self-locking system without tools
 Clamping range 8 - 127 mm (0.31" to 5")
 Very high dynamic load
 Very low moisture absorption
 Chloride- and weather resistant
 Very high stress corrosion crack stability
 Approved by: KIWA®, UL®

Technical data clic® top 8 - 127 mm

Material quality	Polyamide PA 12
Density at +20 °C	1,01 g/cm ³
Elongation at yield	12%
E-Modulus in tension	1100 MPa
Water absorption at 23 °C	1,50 %
Moisture absorption (23 °C / 50 % r.F.)	0,50 %
Shore hardness D	70
Disruptive strength	32 kV/mm
Weather proof	-40 °C up to +110 °C
Mounting temperature	down to -25 °C
Maximum service temperature short term	+150 °C
Maximum service temperature long term	+90 to +110 °C
Flammability	HB according to UL 94
Calorific / energy value	34 kJ / gram
Impact value (Charpy, +23 °C)	7
Impact value (Charpy, -30 °C)	6
Halogen	halogen free as per IEC 754-2
Petrol, diesel, oil	resistant
Corrosion	resistant
Chloride salt	resistant
UV	resistant ISO 4892-2
Standard colours	dark grey (RAL 7001)
Special colours	on request

Chemical resistance

In general, polyamide 12 is resistant to many organic solvents and alkalis. Grilamid is also unaffected by petroleum fractions, oils and fats.

Concentrated acids cause relatively rapid hydrolytic degradation of all polyamides but PA 12 is resistant to dilute mineral acid and most organic acids.

The hydrolysis and environmental stress-cracking resistance of Grilamid are the most significant advantages of Grilamid in comparison to other engineering plastics.

PA 12 has a distinctly higher hydrolysis resistance than PA6 and PA66. The matrix is less hydrophilic, absorbs less water, even at elevated temperatures and, therefore, is less affected by hydrolysis.

The recommendations and data given are based on our experience to date. No liability can be assumed in connection with their usage and processing.

How to find the right clic®

The most important criteria for selection, such as type and diameter of the pipe or cable as well as existing certifications, are listed together in table form, allowing you to find quickly the right CLIC

clic® Type	Clamping range [mm]		Steel		Copper	Cast iron	PE	PVC	Cable-metric measur-	Co-cable	Certification		Recomm. Load * [N]				
	min.	max.									mm	inch		M	inch	Kiwa	UL
			mm	inch													
8	7,8	9,5							8		✓		170				
10	9,5	11,8			10				10		✓	✓	185				
12	11,8	14,3	13,5	1/4"	12				12		✓	✓	200				
15	14,3	16,8			15			16	16	1/2"	✓	✓	220				
17	16,8	19,5	17,2	3/8"	18						✓	✓	235				
20	19,5	21,8	21,3	1/2"				20	20	5/8"	✓	✓	250				
22	21,8	24,8			22						✓	✓	270				
25	24,8	27,8	26,9	3/4"				25	25		✓	✓	300				
28	27,8	31,2			28					7/8"	✓	✓	320				
32	31,2	35,5	33,7	1"	35		32	32	32		✓	✓	370				
36	35,5	39,5								1 1/4"	✓	✓	400				
40	39,5	43,5	42,4	1 1/4"	42		40		40		✓	✓	440				
47	46,5	50,5	48,3	1 1/2"		48	50	50	50	1 5/8"	✓	✓	470				
51	50,5	55,5			54						✓	✓	500				
59	58,5	64,0	60,3	2"	64			63			✓		540				
63	63	71					63		63		✓		600				
71	71	80	76,1	2 1/2"	76	78	75	75			✓		740				
80	80	90	88,9	3"	89						✓		880				
90	90	101					90				✓		1000				
101	101	113			108	110	110	110			✓		1200				
113	113	127	114,3	4"	114		125	125			✓		1350				

* With screw DIN 96 at + 20 °C, safety factor ~ 3 included

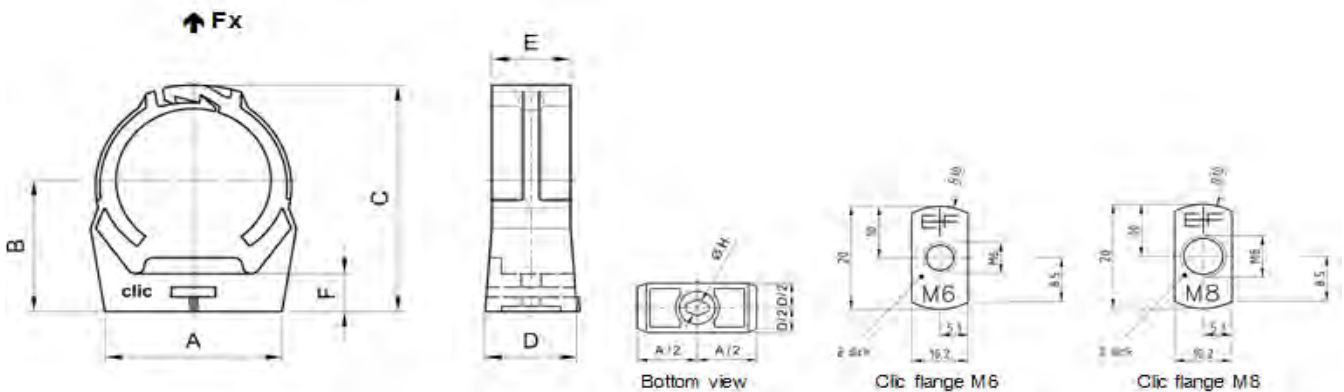
Material	Concentration	Resistance at +23 °C	Material	Concentration	Resistance at +23 °C
Acetic acid		●●	Milk		●●●
Acetone		●●●	Mineral oil		●●●
Acetylene		●●●	Naphthaline		●●●
Aluminium salts	aqueous	●●●	Nitric acid		○
Ammonia	aqueous	●●●	Nitrobenzene		●●
Amylacetate		●●	Oils		●●●
Aniline		●●●	Oleic acid		●●●
Antifreeze		●●●	Oleum		○
Benzene		●●●	Oxalic acid		●●●
Benzine		●●●	Oxygen		●●●
Benzyl alcohol		●	Ozone		●
Bromine		●	Paraffin oil		●●●
Butane		●●●	Perchloroethylene		●●●
Butanol		●●●	Petroleum		●●●
Carbon tetrachloride		●●	Petroleum ether		●●●
Caustic potash	10%	●●●	Phenol		●
Caustic potash	50%	●●●	Potash		●●●
Chlorobenzene		●	Propane		●●●
Chlorine		○	Pyridine		●●●
Chloroform		●	Salicylic acid		●●●
Citric acid		●●	Sea water		●●●
Copper sulphate		●●●	Silicon oils		●●●
Cresol		○	Soap suds		●●●
Decalin		●●●	Soda	10%	●●●
Eatible fat		●●●	Soda	50%	●●●
Engine oil		●●●	Sodium chloride	saturated	●●●
Ethanol		●●●	Sodium hydroxide	10%	●●●
Ether		●●●	Sodium hydroxide	50%	●●●
Ethyl acetate		●●●	Sodium silicate		●●●
Ethylene oxide		●●●	Sodium sulphate	concentrated	●●●
Fats		●●●	Starch		●●●
Fluorine gas		●	Stearic acid		●●●
Formaldehyde		●●	Stearin		●●●
Formic acid	concentrated	●	Styrene		●●●
Frigen	liquid F12	●●●	Sulphur dioxide		●●
Frigen	liquid F22	●	Sulphuric acid	10%	●●
Fuel		●●●	Sulphuric acid	concentrated	●
Glycerine		●●●	Table salt		●●●
Glycol		●●●	Tallow		●●●
Heating oil		●●●	Tartaric acid		●●●
Heptane		●●●	Tetralin		●●●
Hydraulic oil		●●●	Toluene		●●●
Hydrochloric acid	1%	●●	Transformer oil		●●●
Hydrochloric acid	10%	●	Trichlorethane		●●
Hydrogen peroxide	20%	●●	Trichlorethylene		●●
Hydrosulphide		●●●	Turpentine		●●●
Iodine tincture		○	Urea		●●●
Iso-octane		●●●	Uric acid		●●●
Isopropanol		●●●	Urine		●●●
Kaliumpermanganat		○	Vaseline		●●●
Kerosene		●●●	Vinegar		●●●
Lactic acid		●●	Water		●●●
Magnesium chloride	10%	●●●	Wax		●●●
Mercury		●●●	Xylene		●●●
Methane		●●●	Zinc chloride	aqueous	●●●
Methanol		●●			
Methylene chloride		●			

●●● resistant - ●● limited resistance - ● not resistant - ○ soluble, greatly affected

clíc® top type selection chart for od 8 - 64mm on pipes or cables

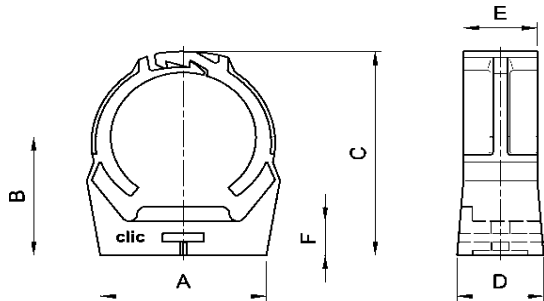
clíc® top Type	Steel		Copper	Cast iron	PE	PVC	Cable-metric measur	Coaxial cable	Certification			Breaking load [N]
	mm	inch							Kiwa		UL	
8							8				✓	280
10			10				10		✓		✓	420
12	13,5	1/4"	12				12		✓		✓	420
15			15			16	16	1/2"	✓		✓	500
17	17,2	3/8"	18						✓		✓	650
20	21,3	1/2"				20	20	5/8"	✓		✓	700
22			22						✓		✓	750
25	26,9	3/4"				25	25		✓		✓	850
28			28					7/8"	✓		✓	900
32	33,7	1"	35		32	32	32		✓		✓	1000
36								1 1/4"	✓		✓	1100
40	42,4	1 1/4"	42		40		40		✓		✓	1150
47	48,3	1 1/2"		48	50	50	50	1 5/8"	✓		✓	1300
51			54						✓		✓	1400
59	60,3	2"	64			63					✓	1600

** with screw DIN 96 at +20 °C, safety factor must be considered!



clíc® top Type	Clamping range [mm]		A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	H*		
	min.	max.							wood [mm]		metric
8	7,8	9,5	17,1	17,5	26,4	17,1	14,5	7,5	4,5		M6
10	9,5	11,8	17,1	17,5	26,2	17,1	14,5	7,5	4,5		M6
12	11,8	14,3	20,2	19,5	28,3	17,2	14,5	7,5	4,5		M6
15	14,3	16,8	20,6	18,8	32,0	17,1	14,5	7,5	4,5		M6
17	16,8	19,5	22,5	23,7	35,4	19,5	16,0	7,8	4,5		M6
20	19,5	21,8	24,8	24,9	39,4	20,0	16,3	7,8	4,5		M6
22	21,8	24,8	27,8	26,0	42,0	20,0	16,5	7,8	4,5		M6
25	24,8	27,8	30,4	28,0	45,1	20,0	17,0	8,8	4,5		M6
28	27,8	31,2	33,4	31,7	48,9	20,2	17,0	8,8	4,5		M6
32	31,2	35,5	38,0	34,5	54,4	21,0	17,5	9,0	4,5		M6 / M8
36	35,5	39,5	41,8	36,5	59,4	21,0	18,0	9,1	4,5		M6 / M8
40	39,5	43,5	46,2	38,2	64,2	21,0	18,6	9,4	4,5		M6 / M8
47	46,5	50,5	53,5	43,0	72,8	22,0	19,5	9,8	4,5		M6 / M8
51	50,5	55,5	58,6	46,8	78,7	23,0	20,0	10,2	4,5		M6 / M8
59	58,5	64,0	66,3	52,0	88,2	23,2	21,0	10,7	4,5		M6 / M8

* H = screw diameter; wood screw (wood) / metal screw (metric)



CLIC type	A mm	B mm	C mm	D mm	E mm	F mm	safe working load in all directions* N
8	17.1	17.5	26.4	17.1	14.5	7.5	170
10	17.1	17.5	26.2	17.1	14.5	7.5	185
12	20.2	19.5	28.3	17.2	14.5	7.5	200
15	20.6	20	32	17.1	14.5	7.5	220
17	22.5	22	35.4	19.5	16	7.8	235
20	24.8	23.7	39.4	20	16.3	7.8	250
22	27.8	25.5	42	20	16.5	7.8	270
25	30.4	26.8	45.1	20	17	8.8	300
28	33.4	28.8	48.9	20.2	17	8.8	320
32	38	32.2	54.4	21	17.5	9	370
36	41.8	34.3	59.4	21	18	9.1	400
40	46.2	36.3	64.2	21	18.6	9.4	440
47	53.5	40.6	72.8	22	19.5	9.8	470
51	58.6	44.3	78.7	23	20	10.2	500
59	66.3	48.6	88.2	23.2	21	10.7	540

* With screw DIN 96 at + 20 °C, safety factor > 2 included

CLIC TOP dark grey (RAL 7001), 8-64 mm

type	clamping range Ø mm	metric norm	pcs/ carton	Item no
8	7,8 - 9,5	8	100	A 88.900
10	9,5 - 11,8	10	100	A 88.901
12	11,8 - 14,3	12	100	A 88.902
15	14,3 - 16,8	16	100	A 88.903
17	16,8 - 19,5	-	100	A 88.904
20	19,5 - 21,8	20	100	A 88.905
22	21,8 - 24,8	-	100	A 88.906
25	24,8 - 27,8	25	50	A 88.907
28	27,8 - 31,2	-	50	A 88.908
32	31,2 - 35,5	32	50	A 88.909
36	35,5 - 39,5	-	50	A 88.910
40	39,5 - 43,5	40	25	A 88.911
47	46,5 - 50,5	50	25	A 88.912
51	50,5 - 55,5	-	25	A 88.913
59	58,5 - 64,0	63	20	A 88.914

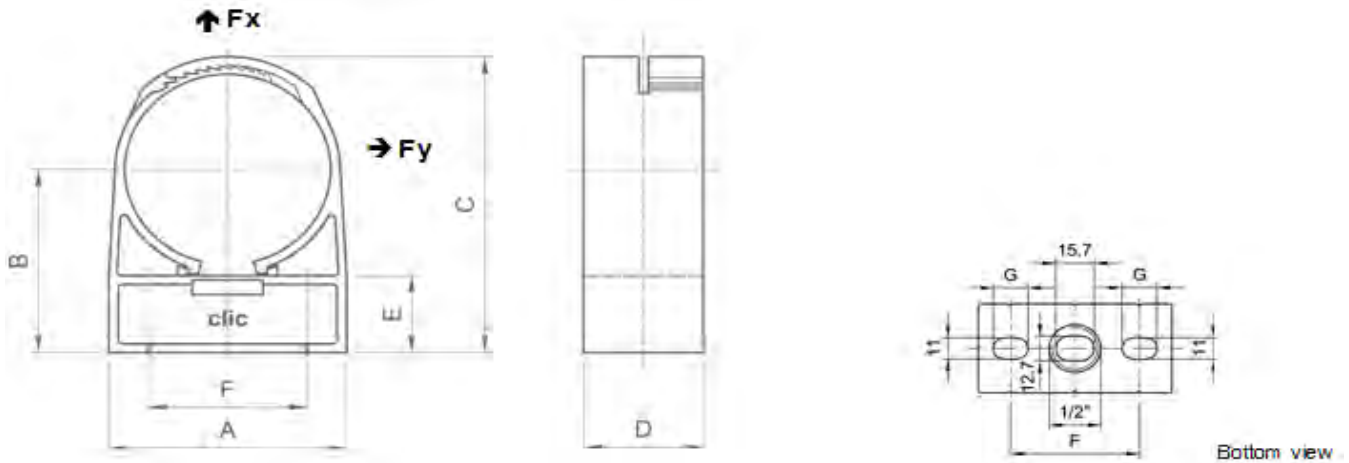
Metric norm = Euro norm NIN 2000



clíc® top type selection chart for od 63 - 127mm on pipes or cables

clíc® Type	Steel		Copper mm	Cast iron mm	PE mm	PVC mm	Cable ducts metric	Coaxial cable inch	Certification			Breaking load [N]	
	mm	inch							UL	Fx*	Fy*		
63					63		63			✓	1800	1000	
71	76,1	2 ½"	76	78	75	75				✓	2200	1300	
80	88,9	3"	89							✓	2600	1600	
90					90					✓	3000	1900	
101			108	110	110	110				✓	3500	2200	
113	114,3	4"	114		125	125				✓	4000	2500	

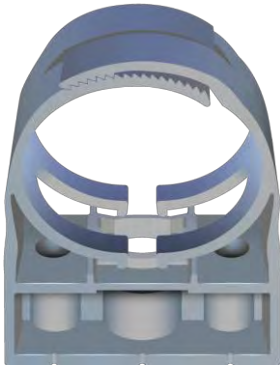
* with 2 screws DIN 571 at +20 °C, safety factor must be considered!



Type	Clamping range		A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]
	min.	max.							
63	63	71	78	72	115	40	31	52	11
71	71	80	87	77	124	40	31	58	15
80	80	90	98	83	136	40	31	66	16
90	90	101	110	89	148	40	31	76	16
101	101	113	124	96	163	40	31	86	17
113	113	127	139	105	180	40	31	102	17

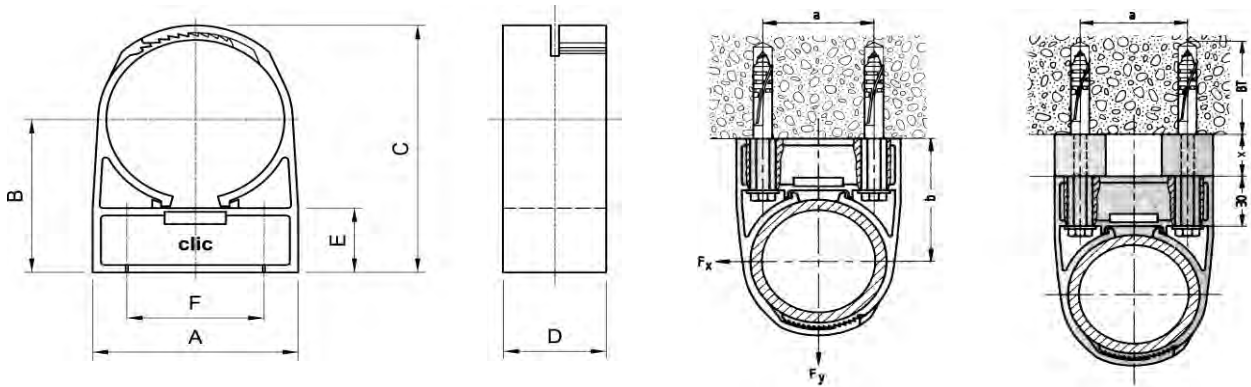
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CLIC TOP 63-127 mm



Easy and excellent fixing for pipes with diameter 63 to 127 mm
 Ideal for infrastructural & industrial buildings
 Listed / approved by UL
 Secure against vibration

Technical information

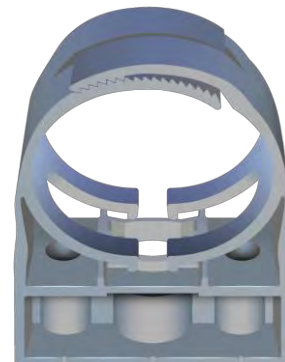


type	A mm	B mm	C mm	D mm	E mm	F mm	safe working load	
							F_y N	F_x N
63	78	72	115	40	31	52	600	340
71	87	77	124	40	31	58	740	440
80	98	83	136	40	31	66	880	540
90	110	89	148	40	31	76	1000	640
101	124	96	163	40	31	86	1200	740
113	139	105	180	40	31	102	1350	840

with screw DIN 571 at + 20 °C, safety factor ~ 3 included
 * Load directions as per above

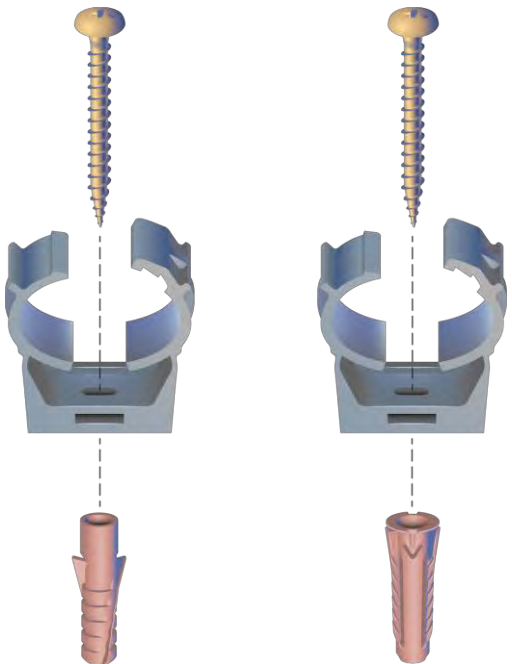
CLIC Top dark grey (RAL 7001), 63-127 mm

type	clamping range Ø mm	pcs/ carton	Item no
63	63 - 71	25	A 88.340
71	71 - 80	40	A 88.341
80	80 - 90	40	A 88.342
90	90 - 101	25	A 88.343
101	101 - 113	25	A 88.344
113	113 - 127	25	A 88.345

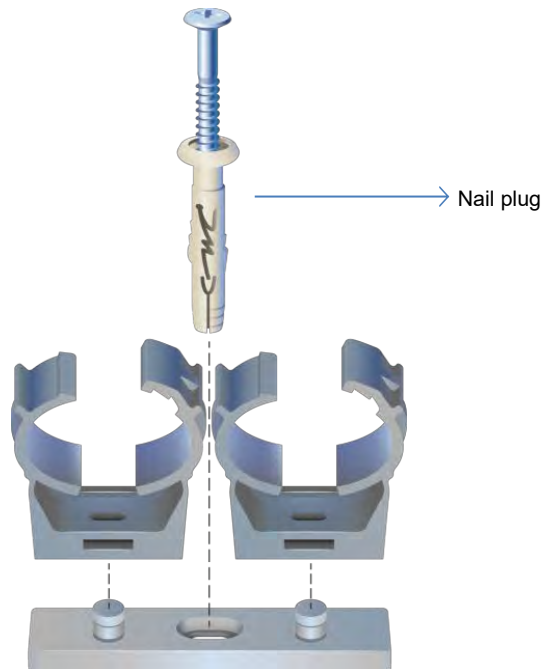


PAN-HEAD Woodscrew 4,5X45
 Woodscrew 4,5X45, T25-head ss A4 with washer

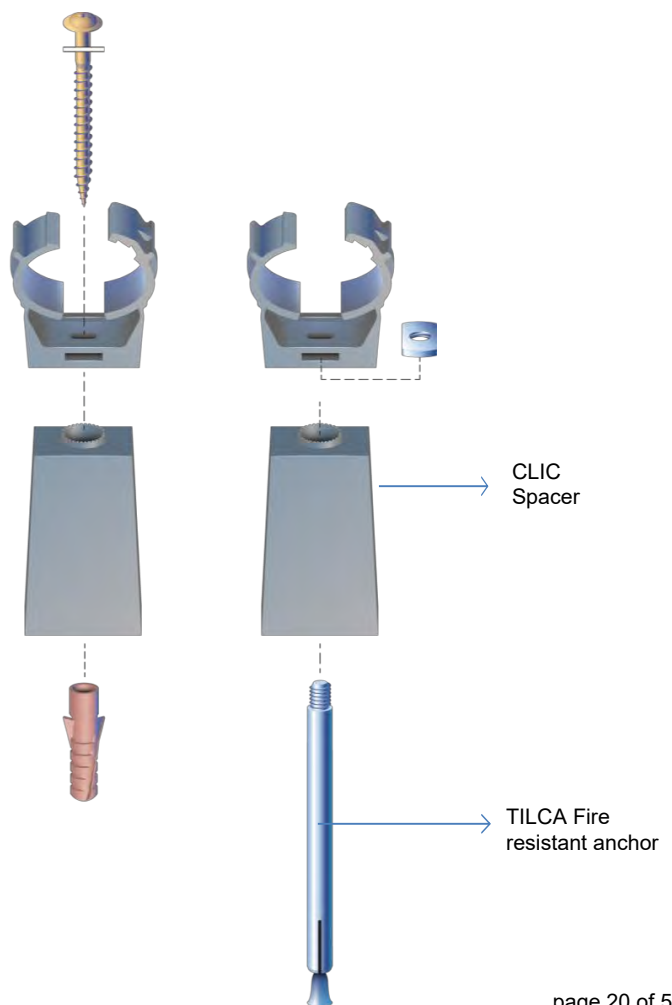
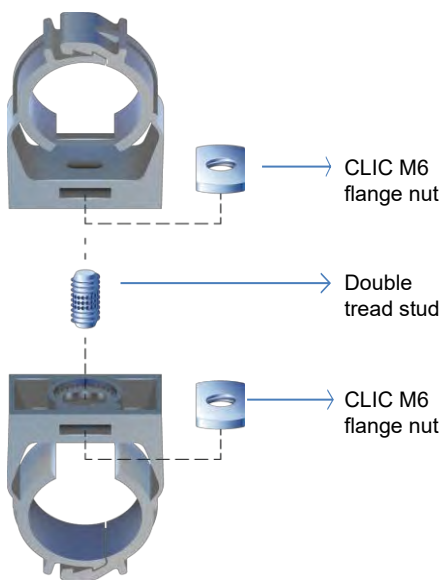
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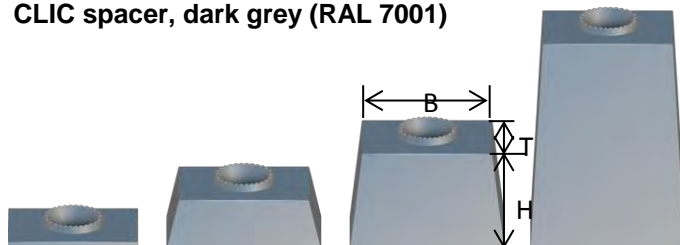
DELTA nylon plug 6mm / DELTA X multipurpose plug 6



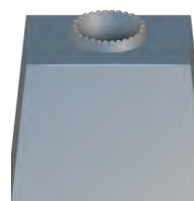
CLIC Base plate double 70X20X5 mm
 CLIC Base plate triple 110X20X5 mm



CLIC spacer, dark grey (RAL 7001)



size	dimension T x B x H mm	pcs/ carton	Item no
2,5	20x24x2,5	100	A 88.370
5	20x24x5	100	A 88.371
15	20x24x15	100	A 88.372
25	20x24x25	100	A 88.373
35	20x24x35	100	A 88.374
45	20x24x45	100	A 88.375
65	20x24x65	50	A 88.376
85	23x30x85	50	A 88.377



3

CLIC base plate for 2 pcs

for CLIC type 8–25

dimension length x depth x height mm	colour	pcs/ carton	Item no
70x20x5	dark grey	50	A 88.270



CLIC base plate for 3 pcs

for CLIC type 8–25

dimension length x depth x height mm	colour	pcs/ carton	Item no
110x20x5	dark grey	25	A 88.271



DELTA nylon plug

size ¹	length of plug	for wood- screw Ø mm	pcs/ carton	Item no
6	29	3.5-5	100	A 10.102
10	48	6-8	50	A 10.105



¹ Ø drill hole mm

Double-thread stud M6 and M 8

zinc plated or stainless steel A4 (1.4404/AISI 316)

size ¹ mm	qual.	pcs/ carton	Item no
M6/M6x12	zp	100	B 16.111
M6/M6x12	ss	100	B 16.115



¹ thread x length mm

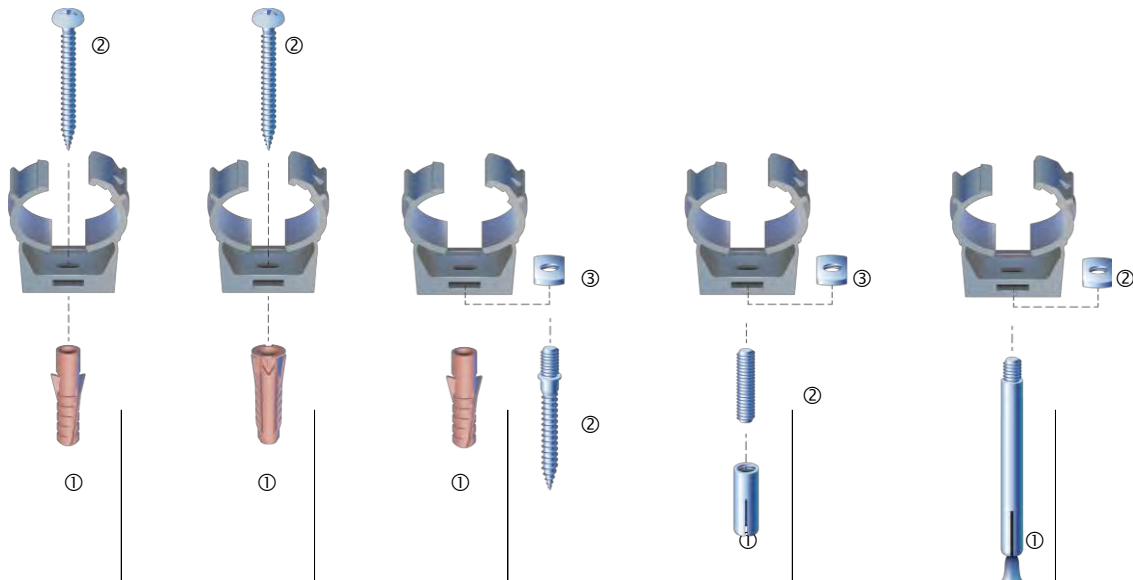
TILCA Fire-resisting anchor

zinc plated or stainless steel (1.4401/AISI 316)

size ¹ mm	thread length mm	drill Øxmin. depth mm	qual.	pcs/ carton	Item no
6/54	12	6 x 32	zp	100	A 45.807
6/54	12	6 x 32	A4	100	A 45.827



Mounting systems for brick and concrete



	Item no	Item no	Item no	Item no	Item no
①	A 10.102	A 10.402	A 10.102	A 42.100	A 45.807
②	A 63.324	A 63.324	A 63.100	B 16.111	A 88.130
③	-	-	A 88.130	A 88.130	-
①	A 10.102	A 10.202	-	A 42.105	A45.827
②	A 62.170	A 62.170	-	B 16.115	A 88.240
③	-	-	-	A 88.240	-



CLIC flange M 6

for mounting CLIC range 8–59, zinc plated or stainless steel A4 (1.4404/AISI 316)

description	pcs/ carton	Item no
CLIC M6 flange nut zinc plated	100	A 88.130
CLIC M6 flange nut ss A4	100	A 88.240



TILCA flush anchor

zinc plated (zp) or stainless steel A4 (ss) (1.4401/AISI 316)
with DIBt-approval

size ¹	drilling hole Ø×d mm	thread length in mm	qual.	pcs/ carton	Item no
M6x30	8 x 33	13	zp	100	A 42.100
M6x30	8 x 33	13	ss	100	A 42.105
M8x30	10 x 33	13	zp	100	A 42.101



¹ female thread x length of plug mm

Pan-Head wood screw

with cross slot Z (pozidrive 2 impression), zinc plated yellow passivated

size ¹ mm	pcs/ carton	Item no
4,5x45	200	A 63.324
4.5x50	200	A 63.325

¹ Ø x length mm



Pan-Head wood screw stainless steel

with TX 20, stainless steel A4

size ¹ mm	pcs/ carton	Item no
4.5x50	100	A 62.178
4.5x70	100	A 62.184
4.5x80	100	A 62.179
4.5x90	100	A 62.180
4.5x110	100	A 62.181
4.5x125	100	A 62.185

¹ Ø x length mm



3



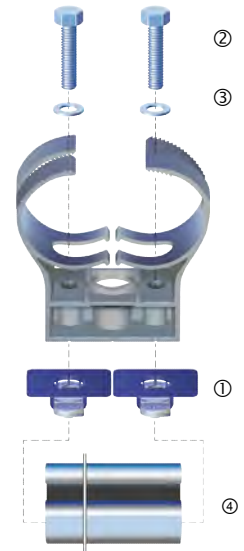
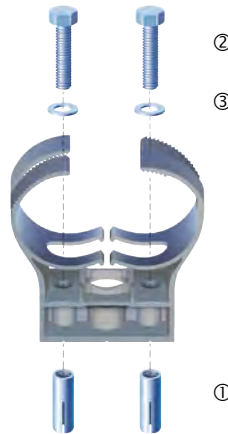
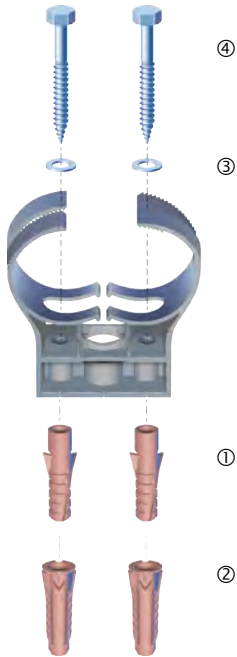
CLIC spacers dark grey (RAL 7001)

Polyamide

size ¹	dimension l x w x h mm	pcs/ carton	Item no
5	40x30x5	100	A 88.350
10	40x30x10	100	A 88.352
30	40x30x30	100	A 88.356

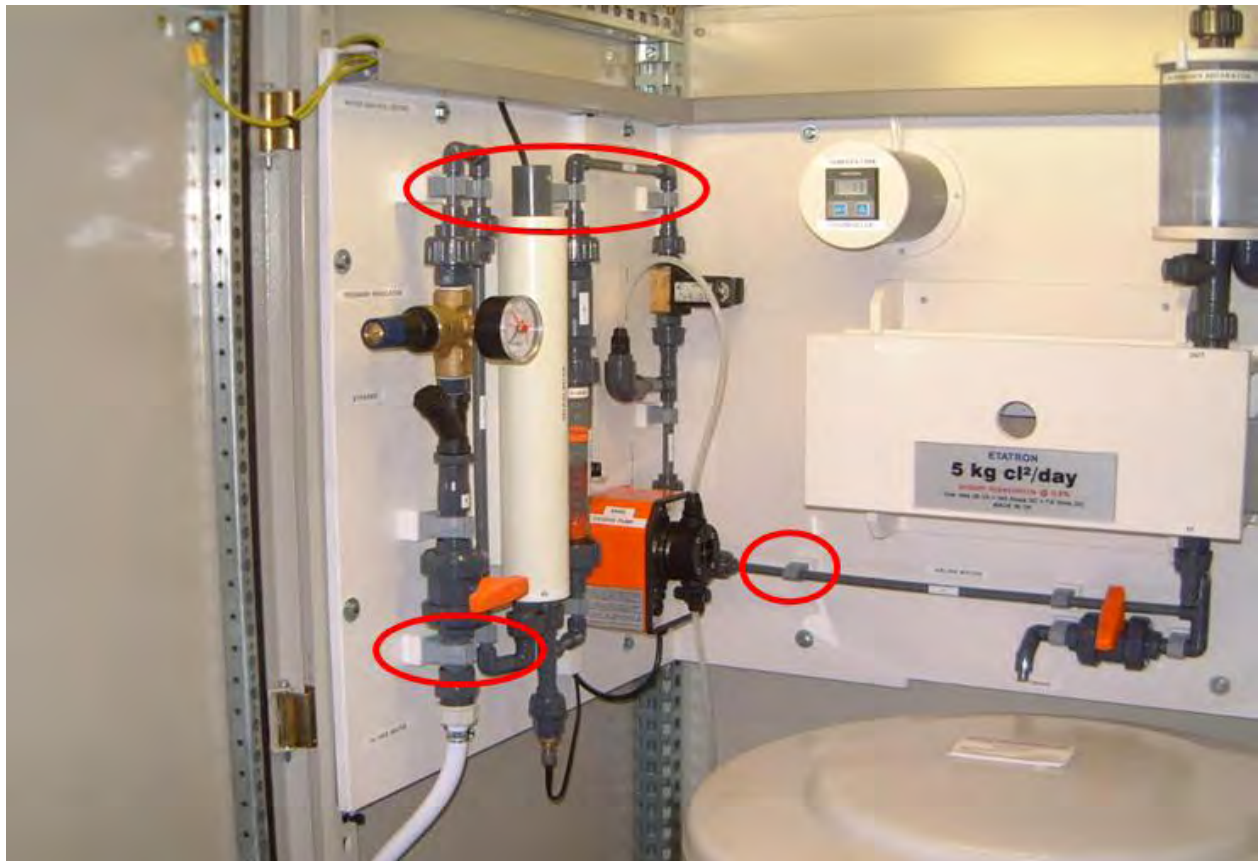
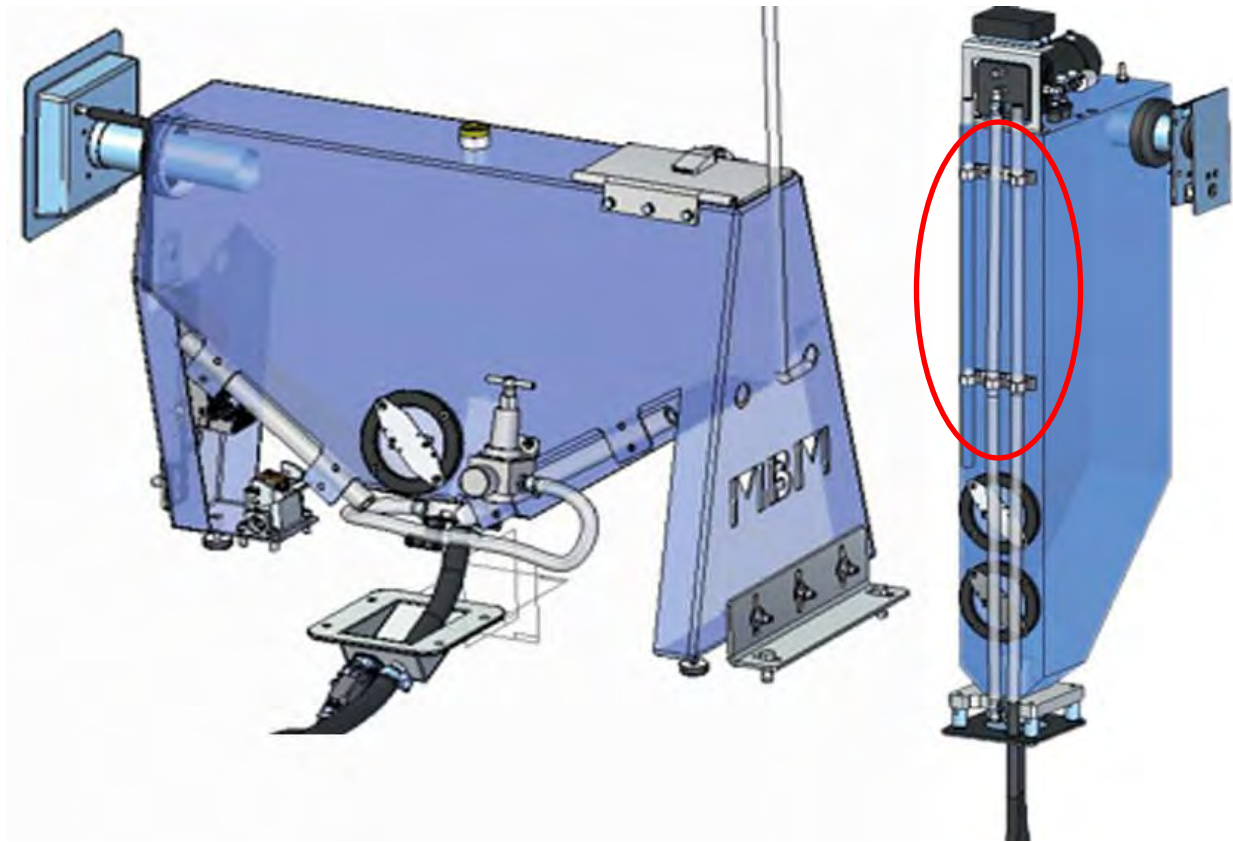


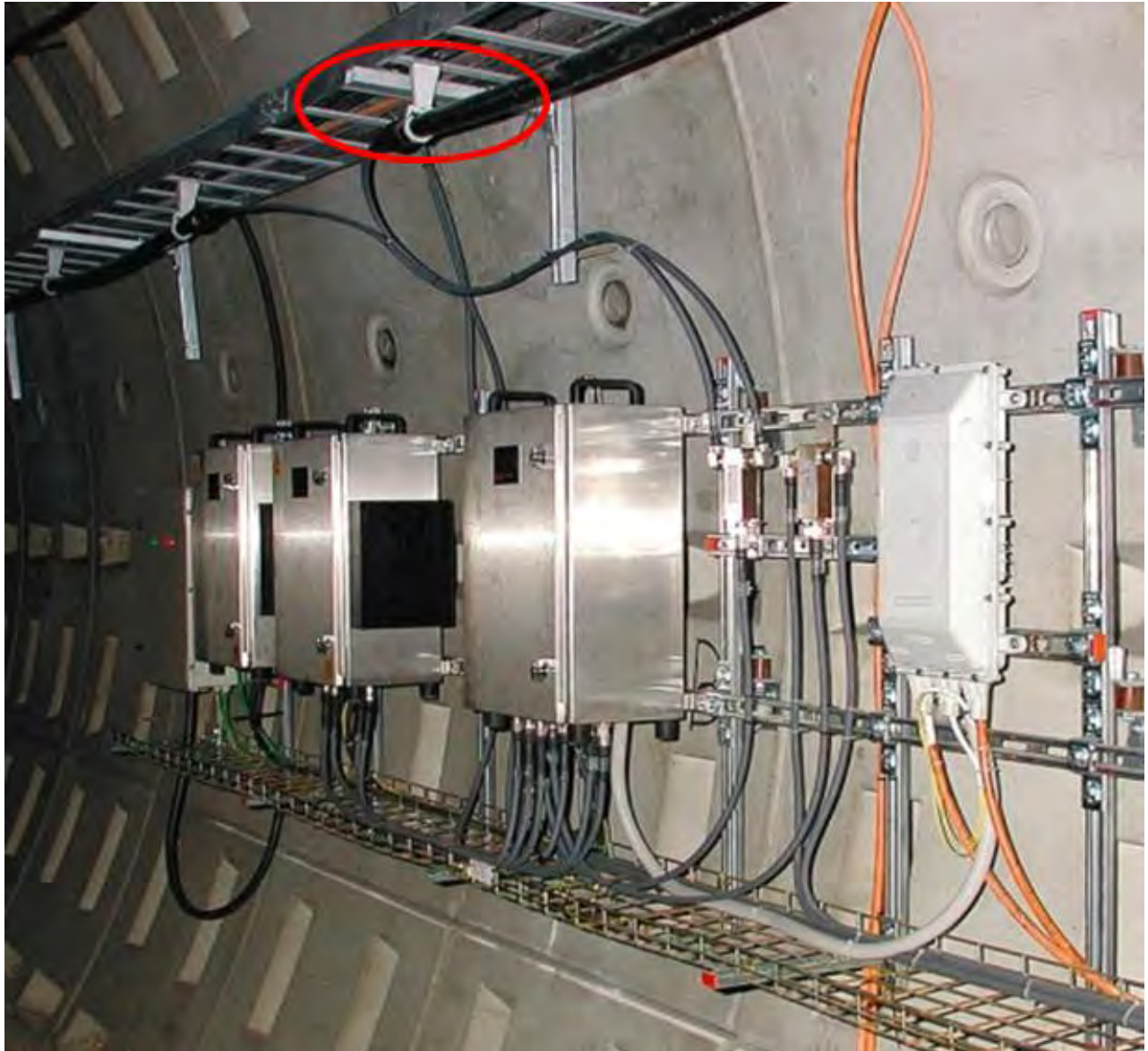
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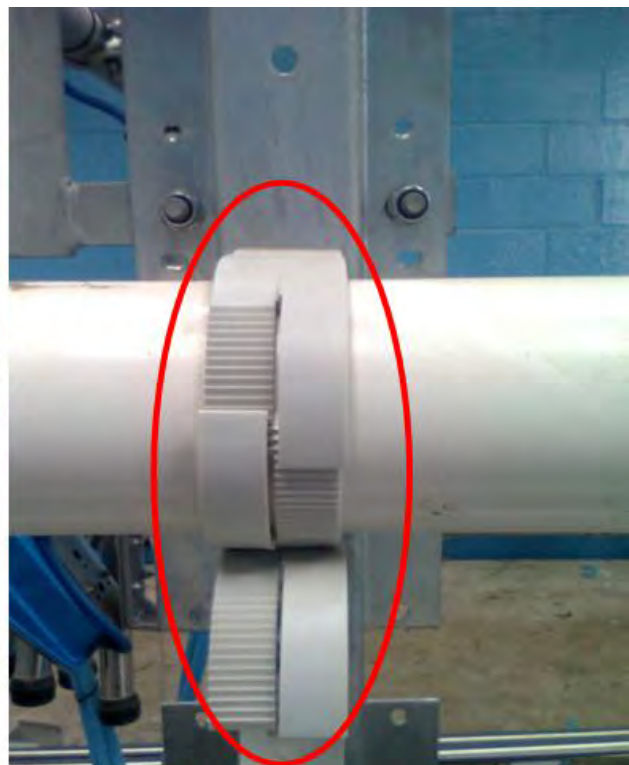
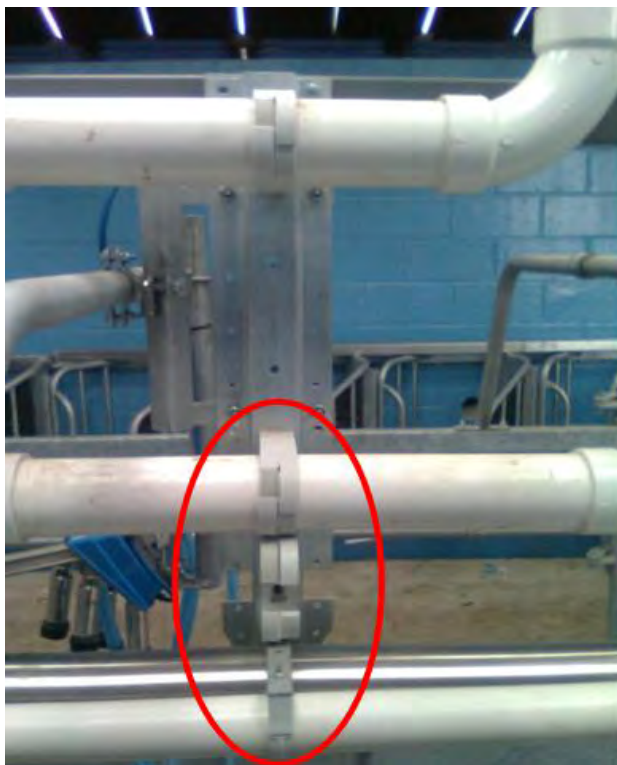


Item no	Item no	Item no
① A 10.105 Delta 10 Nylon plug	① A 42.101 Tilca anchor M8x30	A 85.236 Thread carrier M8
② A 10.405 Delta XM 10 nylon plug	② A 64.142 Hex. Screw M8x40	A 64.143 Hex. Screw M8x50
③ A 66.106 Washer Ø 8,4	③ A 66.106 Washer Ø 8,4	A 66.106 Washer Ø 8,4
④ A 64.258 Hex. w.-screw 8x70		Unistrut
	① A 42.106 Tilca anchor M8x30	
	② on req	
	③ A 66.116 Washer Ø 8,4 A4	

stainless steel







CLIC Top black radiating cable fastening

radiating cable	outer Ø mm	CLIC type	clamping range Ø mm
3/8"	10.5	10	9,5 - 11,8
1/2"	13.2	12	11,8 - 14,3
1/2"	15.9	15	14,3 - 16,8
5/8"	22	22	21,8 - 24,8
7/8"	28.5	28	27,8 - 31,2
1 1/4"	39.4	36	35,5 - 39,5
1 5/8"	50	47	46,5 - 50,5

CLIC TOP black (RAL 9011), 14-50 mm

type	clamping range Ø mm	metric norm	pcs/ carton	Item no
15	14.3 - 16.8	16	100	A 88.960
17	16.8 - 19.5	-	100	A 88.961
20	19.5 - 21.8	20	100	A 88.962
25	24.8 - 27.8	25	50	A 88.964
28	27.8 - 31.2	-	50	A 88.965
32	31,2 - 35,5	32	50	A 88.968
36	35.5 - 39.5	-	50	A 88.966
47	46.5 - 50.5	50	25	A 88.967

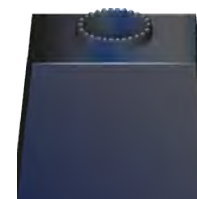


3



CLIC spacer, black (RAL 9011)

size	dimension T x B x H mm	pcs/ carton	Item no
15	20x30x15	100	A 88.278
25	20x30x25	100	A 88.279
35	20x24x35	100	A 88.268
45	20x30x45	100	A 88.774
65	20x30x65	50	A 88.775
85	23x30x85	50	A 88.269

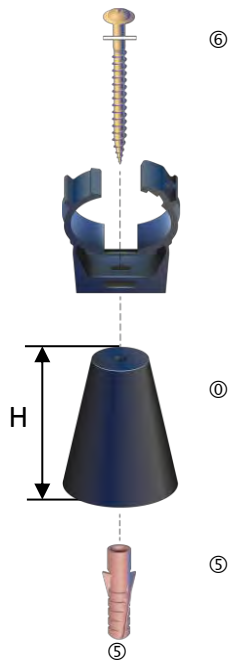


CLIC spacer round, black (RAL 9011)

size	dimension length mm	pcs/ carton	Item no
50	50	100	A 88.274
80	80	500	A 88.287



Mounting systems with spacers



H	Item no	Item no	Item no	Item no	Item no	Item no
50	A 88.274	A 10.102	A 62.180	A 88.130	A 88.240	A 45.910
80	A 88.287	A 10.102	A 62.185	A 88.130	A 88.240	A 45.912

stainless steel

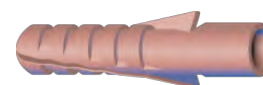
Fire resisting fixing point (stainless steel A4 1.4401)



Clamping range mm	Type	Recommended F in kN	pcs/ carton	Item no
14.5 - 17	SPIT DN 16 A4	0.53	100	A 90.111
19 - 21	SPIT DN 20 A4	0.45	100	A 90.112
24 - 26	SPIT DN 25 A4	0.38	100	A 90.113
31 - 34	SPIT DN 32 A4	0.3	100	A 90.114
39 - 42	SPIT DN 40 A4	0.29	50	A 90.115
48 - 52	SPIT DN 50 A4	0.23	50	A 90.116
62 - 64	SPIT DN 63 A4	0.18	25	A 90.117

DELTA nylon plug

size ¹	length of plug	for wood-screw Ø mm	pcs/carton	Item no
6	29	3.5-5	100	A 10.102
6	50	4.5	150	A 10.418



Pan-Head wood screw

head T 25 with pressed-on washer, stainless steel A4

size ¹ mm	DELTA plug Ø mm	screw Ø mm	length mm	pcs/carton	Item no
4.5x40	6	4.5	40	100	A 62.182
4.5x55	6	4.5	55	100	A 62.196
4.5x90	6	4.5	90	100	A 62.180
4,5x125	6	4.5	125	250	A 62.185



3

CLIC flange M6

for mounting CLIC range 8–59, zinc plated or stainless steel A4 (1.4404/AISI 316)

description	pcs/carton	Item no
CLIC M6 flange nut zinc plated	100	A 88.130
CLIC M6 flange nut ss A4	100	A 88.240



CLIC flange M8

for mounting CLIC range 32–59, zinc plated or stainless steel A4 (1.4404/AISI 316)

description	pcs/carton	Item no
CLIC M8 flange nut zinc plated	100	A 88.285
CLIC M8 flange nut ss A4	100	A 88.286



TILCA BSD fire-resisting anchor

stainless steel (1.4401/AISI 316)

size ¹ mm	drill Ø mm x depth mm	pcs/carton	Item no
TILCA M6x86/6	6x42	100	A 45.912
TILCA M6x94/6	6x42	100	A 45.913
TILCA M6x56/6	6x42	100	A 45.910
TILCA M6x64/6	6x42	100	A 45.911



TILCA drill bit

drill	Ø mm	shaft	depth mm	Item no
SDS Drill bit 42mm depth	6	SDS plus	42	A 45.862



TILCA setting tool

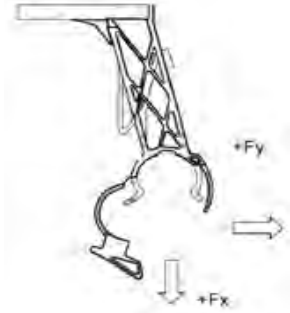
type	Item no
Setting tool for A 45.912	A 45.922
Setting tool for A 45.913	A 45.923
Setting tool for A 45.910	A 45.920
Setting tool for A 45.911	A 45.921



CLIC SKH

radiating cable clamp black, 14-50 mm

CLIC SKH type	wall dist.	base mm	base thickness mm	breaking load in +Fy/+Fx directions , N
1/2"	80	66	10	300
7/8"	80	66	10	300
1 1/4"	80	66	10	300
1 5/8"	80	66	10	300

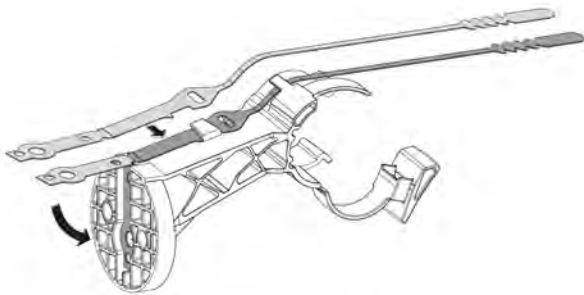


EFCO CLIC SKH black (RAL 9011)

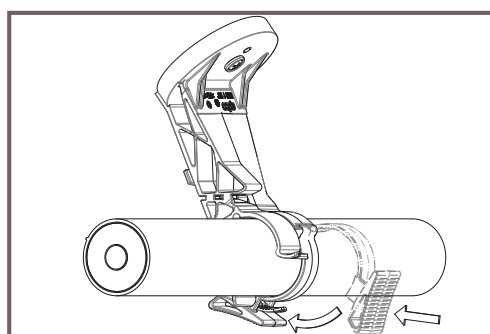
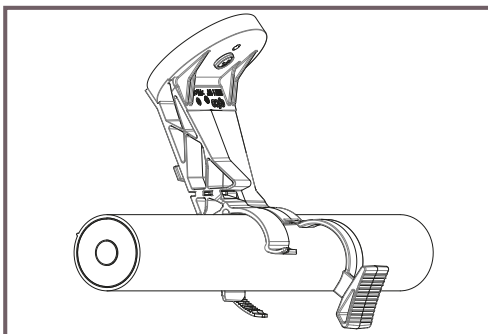
type	clamping range Ø mm	pcs/carton	Item no
1/2"	13.7 - 16.2	150	A 88.470
7/8"	26.5 - 28.7	150	A 88.471
1 1/4"	37.0 - 39.0	100	A 88.472
1 5/8"	44.2 - 48.0	100	A 88.473

EFCO CLIC fire protection insert (material stainless steel A4 1.4401)

type	insert to Item	size	pcs/carton	Item no
EFCO CLIC FSB 1/2	A 88.470	1/2"	50	A 88.480
EFCO CLIC FSB 7/8	A 88.471	7/8"	50	A 88.481
EFCO CLIC FSB 1 1/4	A 88.472	1 1/4"	50	A 88.482
EFCO CLIC FSB 1 5/8	A 88.473	1 5/8"	50	A 88.483



Mounting principle



DELTA XM Multi-Purpose dowel

In combination with the CLIC SKH pan-head screw, suitable for through-hole mounting with the EFCO CLIC SKH radiating cable holder (reduced drill hole depth 50mm)

size ¹	length of plug	for wood-screw Ø mm	pcs/ carton	Item no
6	50	4.5	150 / 1 500	A 10.418



Round-head wood screw

head T 25 with pressed-on washer, stainless steel A4 (1.4578/AISI 316)

size ¹ mm	thickn. fastened max. mm by mounting with DELTA 6	pcs/ carton	Item no
4,5x55	6	100	A 62.196



3

TILCA fire resisting nail anchor N-

- Zinc plated / stainless steel A4 (ss) (1.4401/AISI 316) / HCR 1.4529
- ETA 17/1004

type	drilling hole Ø mm	drill depth mm	anchoror Ø mm	anchoror length mm	pcs/ carton	Item no
TILCA N-K zinc plated	6	40	6	44	200	A 44.974
TILCA N-K ss A4	6	40	6	44	200	A 44.991
TILCA N-K HCR 1.4529	6	40	6	44	200	A 44.998



TILCA fire resisting anchor N

- Zinc plated / stainless steel A4 (ss) (1.4401/AISI 316) / HCR 1.4529
- ETA 17/1004
- Demountable

type	drilling hole Ø mm	drill dept mm	anchoror Ø mm	anchoro length mm	pcs/ carton	Item no
TILCA N zinc plated	6	40	6	49	200	A 44.960
TILCA N ss A4	6	40	6	49	200	A 44.961
TILCA N HCR 1.4529	6	40	6	49	200	A 44.962



TILCA setting tool

type	shaft	Item no
TILCA STNK Setting tool SDS plus 6x205	SDS plus	A 45.999

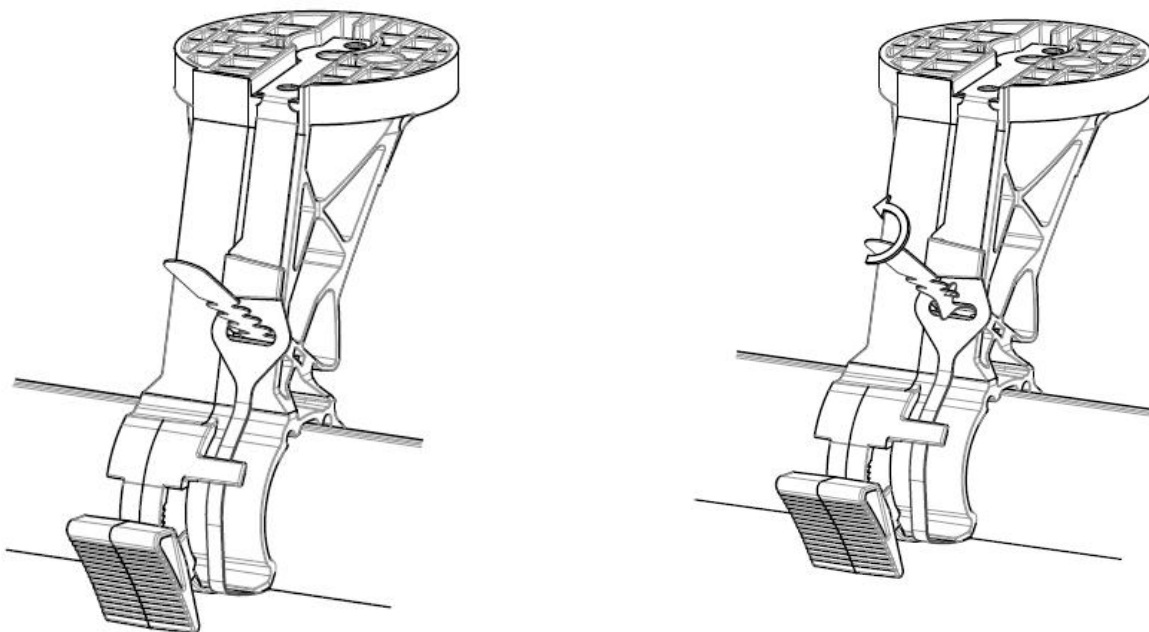
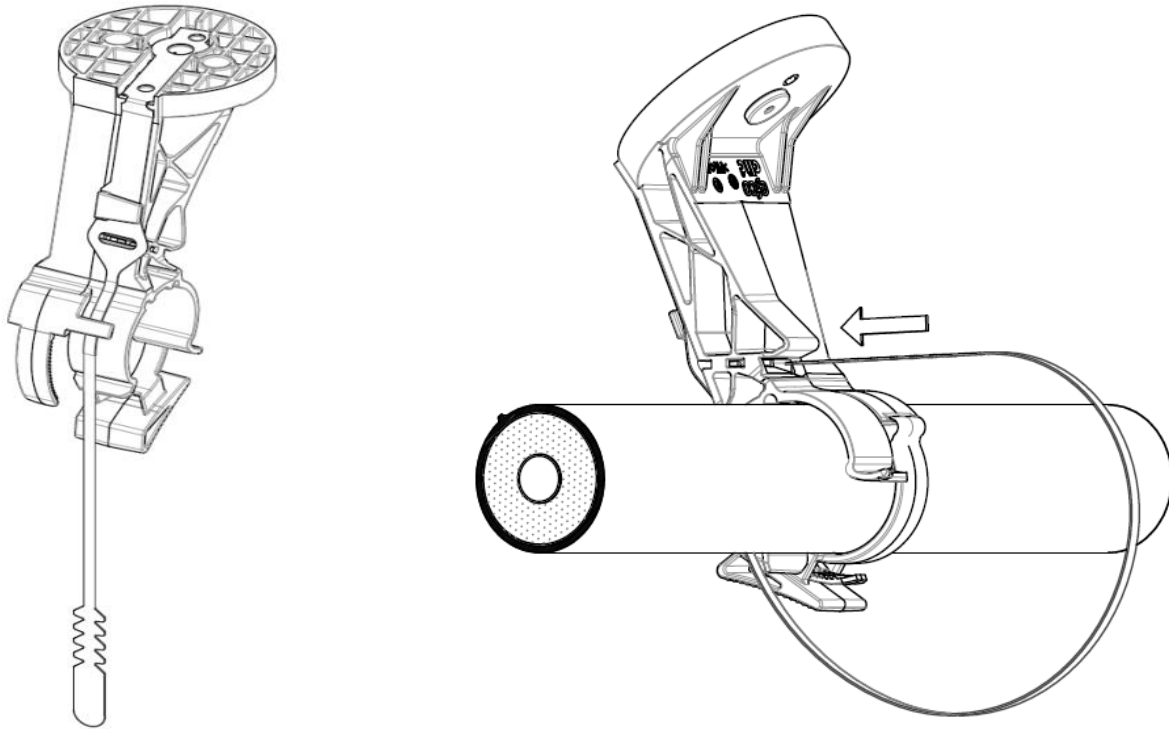


TILCA drill bit

type	drilling hole Ø	drill dept	shaft	Item no
TILCA drill bit	6	42	SDS plus	A 45.862



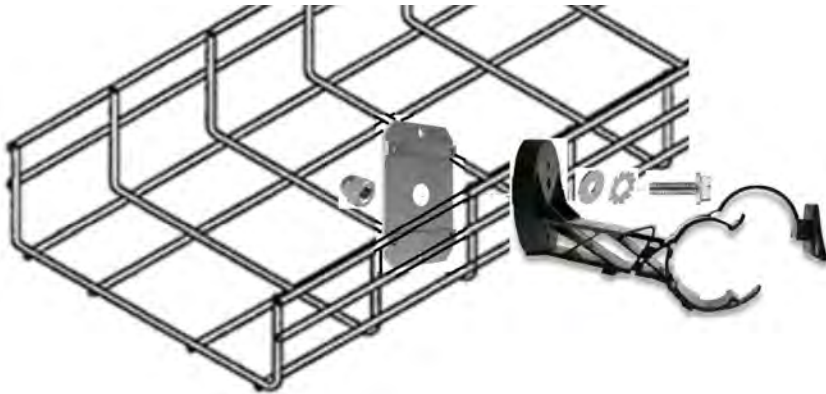
Mounting principle with fire protection insert



3



3





CLIC TOP white

(RAL 9010), 10-50 mm

type	clamping range Ø mm	metric norm	pcs/ carton	Item no
17	16,8 - 19,5	-	100	A 88.453
22	21,8 - 24,8	-	100	A 88.457
28	27,8 - 31,2	-	50	A 88.458

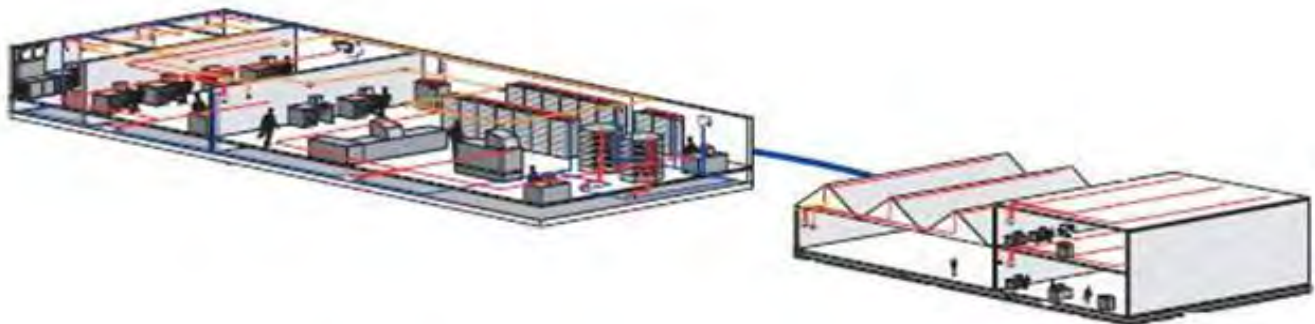
Metric norm = Euro norm NIN 2000



3

CLIC TOP red (RAL 3020), 25-31 mm

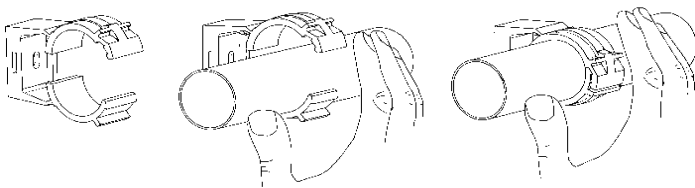
type	clamping range Ø mm	metric norm	pcs/ carton	Item no
28	27.8 - 31.2	-	150	A 88.641



clic[®]

CLIC is a registered trade mark of Egli, Fischer & Co. Ltd

- The economical system for a vast variety of inhouse applications
- One-piece, self locking pipe clamp
- Simple mounting without locking screws
- All types of inhouse installation
- Fast installation
- Clamping range 8-64 mm / 63 mm - 127 mm (0.31" to 5")
- Listed by UL
- Approved by KIWA[®] and UL[®]
- Halogen free as per IEC-Norm 754-2
- Burning behaviour as per UL94 HB



Simply mount CLIC, push pipe in by hand, grips and locks by applying slight pressure.



UV
Resistant



Technical data sheet

clíc® 8 - 64 mm / 63 - 127 mm

Application areas

Installation in the **internal area**
 Chemical industry
 Electrical installations (cable/conduits)
 Sanitary installations (cold and hot water pipes)
 Swimming pools: technical cabinets / racks
 Switching cabinets / Electrical racks

Features

Self-locking system without tools
 Clamping range 8 - 127 mm (0.31" to 5")
 Mounting with bolts or wood screws
 Very little moisture absorption
 Approved by KIWA® and UL®
 Switching cabinets / Electrical racks

Technical data clic® 8 - 64 mm

Material quality	High quality copolymer
Density at +20 °C	1,21 g/cm ³
Elongation at yield	5%
E-Modulus in tension	2100 MPa
Water absorption at 23 °C	0,50 %
Moisture absorption (23 °C / 50 % R.H.)	0,15 %
Shore hardness D	82
Dielectric strength	33 kV/mm
Weather proof	-25 °C up to +90 °C
Mounting temperature	down to -10 °C
Maximum service temperature short term	+120 °C
Maximum service temperature long term	+75 to +90 °C
Flammability	HB according to UL 94
Fire class	B2 according to DIN 4102
Halogen	halogen free as per IEC 754-2
Petrol, diesel, oil	resistant
Corrosion	resistant
Weather-proof	no decomposition with correct use
UV	UV-stabilized as per ISO 4892-2
Standard colours	light grey (RAL 7035)
Special colours	on request

Technical data clic® 63 - 127 mm

Material quality	High quality PP homopolymere
Density at +20 °C	0,91 g/cm ³
Tensile strain at yield	9%
Tensile modulus	1500 MPa
Hardness, Rockwell	98 R-scale
Service temperature	-10 °C to +80 °C
Melting temperature	+230 °C
Flammability	HB according to UL 94
Halogen	halogen free as per IEC 754-2
Corrosion	resistant
UV	not stabilized
Standard colour	light grey (RAL 7035)
Special colour	on request

Material	Concentration	Resistance at +23 °C	Material	Concentration	Resistance at +23 °C
Acetic acid	5%	●●	Heating oil		●●●
Acetone		●	Heptane, Hexane		●●●
Acetylene		●●●	Hydraulic oil		●●
Ammonia	liquid	●●	Hydrochloric acid	10%	●●●
Benzene		●●●	Hydrogen fluoride		●●
Brake fluid		●●●	Inert gas		●●●
Butane		●●●	Iso-octane		●●●
Butanol		●●	Isopropanol		●●●
Butyl acetate		●●	Ketone aliphatic		●
Carbon monoxide		●●●	Lacquer		●●●
Carbon tetrachloride		●	Methanol		●●●
Carbonic acid		●●●	Methylene chloride		●
Caustic potash	10%	●	Mineral oil		●●●
Chlorobenzene		●	Naphthaline		●●
Chlorine gas		●	Nitric acid	10%	●●
Chloroform		●	Nitrohydrochloric acid		●
Citric acid	10%	●●●	Oleum		●
Decalin		●●	Ozone		●
Dibutylphthalate		●●	Paraffin		●●●
Diesel fuel		●●●	Perchloric acid		●
Dimethyl formamide		●	Petroleum ether		●●●
Dimethylether		●●	Phosphoric acid	10%	●●●
Diethylphthalate		●●	Potassium hypochlorite		●●●
Dioxan		●	Silicon oils		●●●
Engine oil		●●●	Sodium hydroxide	10%	●
Ethanol		●●●	Soldering water		●●
Ethyl acetate		●●	Sulphuric acid	10%	●●●
Ethyl ether		●●●	Styrol		●●
Ethylene oxide		●●●	Tetrahydrofurene		●
Fatty acid		●●	Toluene		●●
Fatty alcohol		●●●	Transmission oil		●●●
Formic acid	10%	●●●	Trichlorethane		●
Glycerine		●●●	Trichlorethylene		●
Glycol		●●●	Turpentine		●●
Glysantine		●●●	Turpentine oil replacement		●●
			Xylene		●●

- resistant, none or little change of weight
- limited resistance, contact short-term possible
- not resistant

The recommendations and data given are based on our experience to date.
No liability can be assumed in connection with their usage and processing.

How to find the right clic®

The most important criteria for selection, such as type and diameter of the pipe or cable as well as existing certifications, are listed together in table form, allowing you to find quickly the right CLIC

clic® Type	Clamping range [mm]		Steel		Copper	Cast iron	PE	PVC	Cable-metric measur-	Co-cable	Certification		Recomm. Load * [N]
	min.	max.	mm	inch							Kiwa	UL	
8	7,8	9,5							8		✓		170
10	9,5	11,8			10				10		✓	✓	185
12	11,8	14,3	13,5	1/4"	12				12		✓	✓	200
15	14,3	16,8			15			16	16	1/2"	✓	✓	220
17	16,8	19,5	17,2	3/8"	18						✓	✓	235
20	19,5	21,8	21,3	1/2"				20	20	5/8"	✓	✓	250
22	21,8	24,8			22						✓	✓	270
25	24,8	27,8	26,9	3/4"				25	25		✓	✓	300
28	27,8	31,2			28					7/8"	✓	✓	320
32	31,2	35,5	33,7	1"	35		32	32	32		✓	✓	370
36	35,5	39,5								1 1/4"	✓	✓	400
40	39,5	43,5	42,4	1 1/4"	42		40		40		✓	✓	440
47	46,5	50,5	48,3	1 1/2"		48	50	50	50	1 5/8"	✓	✓	470
51	50,5	55,5			54						✓	✓	500
59	58,5	64,0	60,3	2"	64			63				✓	540
63	63	71					63		63			✓	600
71	71	80	76,1	2 1/2"	76	78	75	75				✓	740
80	80	90	88,9	3"	89							✓	880
90	90	101					90					✓	1000
101	101	113			108	110	110	110				✓	1200
113	113	127	114,3	4"	114		125	125				✓	1350

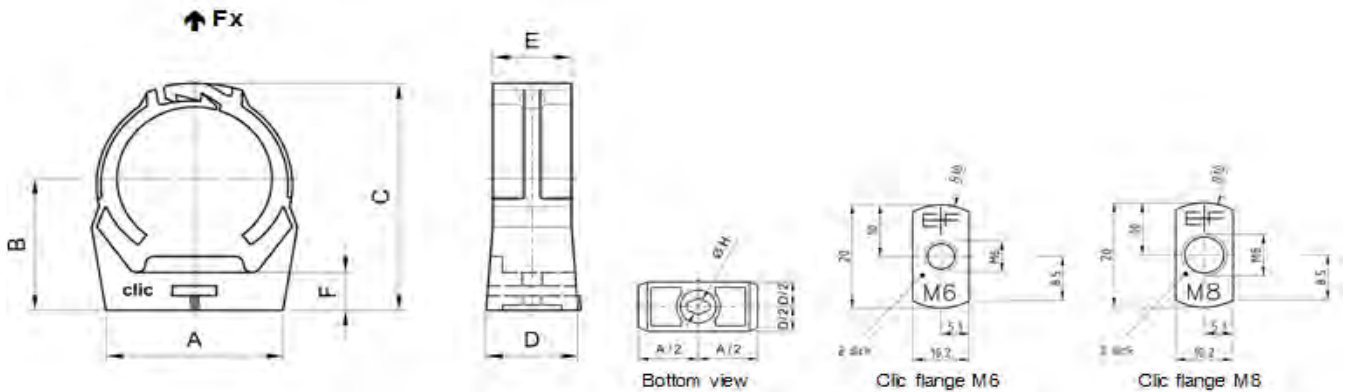
* With screw DIN 96 at + 20 °C, safety factor ~ 3 included



clíc® type selection chart for od 8 - 64mm on pipes or cables

clíc® Type	Steel		Copper	Cast iron	PE	PVC	Cable-d	Coaxial	Certifica			Breaking load [N]
	mm	inch	mm	mm	mm	mm	M	inch	Kiwa		UL	Fx**
8							8				✓	378
10			10				10		✓		✓	420
12	13,5	1/4"	12				12		✓		✓	448
15			15			16	16	1/2"	✓		✓	490
17	17,2	3/8"	18						✓		✓	532
20	21,3	1/2"				20	20	5/8"	✓		✓	560
22			22						✓		✓	602
25	26,9	3/4"				25	25		✓		✓	672
28			28					7/8"	✓		✓	728
32	33,7	1"	35		32	32	32		✓		✓	840
36								1 1/4"	✓		✓	896
40	42,4	1 1/4"	42		40		40		✓		✓	1008
47	48,3	1 1/2"		48	50	50	50	1 5/8"	✓		✓	1050
51			54						✓		✓	1120
59	60,3	2"	64				63				✓	1204

** with screw DIN 96 at +20 °C, safety factor must be considered!



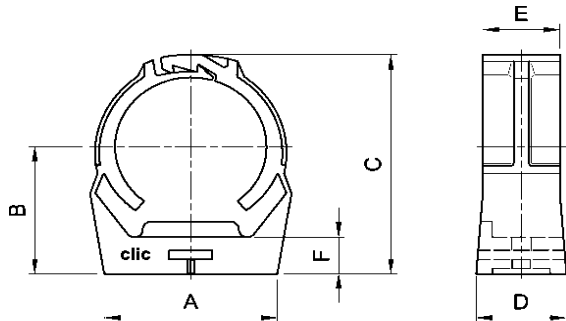
clíc® Type	Clamping range [mm]		A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	H*	
	min.	max.							wood [mm]	metric
8	7,8	9,5	17,1	17,5	26,4	17,1	14,5	7,5	4,5	M6
10	9,5	11,8	17,1	17,5	26,2	17,1	14,5	7,5	4,5	M6
12	11,8	14,3	20,2	19,5	28,3	17,2	14,5	7,5	4,5	M6
15	14,3	16,8	20,6	18,8	32,0	17,1	14,5	7,5	4,5	M6
17	16,8	19,5	22,5	23,7	35,4	19,5	16,0	7,8	4,5	M6
20	19,5	21,8	24,8	24,9	39,4	20,0	16,3	7,8	4,5	M6
22	21,8	24,8	27,8	26,0	42,0	20,0	16,5	7,8	4,5	M6
25	24,8	27,8	30,4	28,0	45,1	20,0	17,0	8,8	4,5	M6
28	27,8	31,2	33,4	31,7	48,9	20,2	17,0	8,8	4,5	M6
32	31,2	35,5	38,0	34,5	54,4	21,0	17,5	9,0	4,5	M6 / M8
36	35,5	39,5	41,8	36,5	59,4	21,0	18,0	9,1	4,5	M6 / M8
40	39,5	43,5	46,2	38,2	64,2	21,0	18,6	9,4	4,5	M6 / M8
47	46,5	50,5	53,5	43,0	72,8	22,0	19,5	9,8	4,5	M6 / M8
51	50,5	55,5	58,6	46,8	78,7	23,0	20,0	10,2	4,5	M6 / M8
59	58,5	64,0	66,3	52,0	88,2	23,2	21,0	10,7	4,5	M6 / M8

* H = screw diameter; wood screw (wood) / metal screw (metric)

4

CLIC 8-64 mm

Technical information



type	A mm	B mm	C mm	D mm	E mm	F mm	safe working load in all directions* N
8	17.1	17.5	26.4	17.1	14.5	7.5	135
10	17.1	17.5	26.2	17.1	14.5	7.5	150
12	20.2	19.5	28.3	17.2	14.5	7.5	160
15	20.6	20.0	32.0	17.1	14.5	7.5	175
17	22.5	22.0	35.4	19.5	16.0	7.8	190
20	24.8	23.7	39.4	20.0	16.3	7.8	200
22	27.8	25.5	42.0	20.0	16.5	7.8	215
25	30.4	26.8	45.1	20.0	17.0	8.8	240
28	33.4	28.8	48.9	20.2	17.0	8.8	260
32	38.0	32.2	54.4	21.0	17.5	9.0	300
36	41.8	34.3	59.4	21.0	18.0	9.1	320
40	46.2	36.3	64.2	21.0	18.6	9.4	360
47	53.5	40.6	72.8	22.0	19.5	9.8	375
51	58.6	44.3	78.7	23.0	20.0	10.2	400
59	66.3	48.6	88.2	23.2	21.0	10.7	430

* With screw DIN 96 at + 20 °C, safety factor > 2 included

CLIC light grey (RAL 7035), 8–64 mm

type	clamping range Ø mm	metric norm	pcs/ carton	Item no
8	7,8 - 9,5	8	100	A 88.238
10	9,5 - 11,8	10	100	A 88.239
12	11,8 - 14,3	12	100	A 88.129
15	14,3 - 16,8	16	100	A 88.131
17	16,8 - 19,5	-	100	A 88.224
20	19,5 - 21,8	20	100	A 88.172
22	21,8 - 24,8	-	100	A 88.173
25	24,8 - 27,8	25	50	A 88.134
28	27,8 - 31,2	-	50	A 88.243
32	31,2 - 35,5	32	50	A 88.137
36	35,5 - 39,5	-	50	A 88.246
40	39,5 - 43,5	40	25	A 88.146
47	46,5 - 50,5	50	25	A 88.189
51	50,5 - 55,5	-	25	A 88.148
59	58,5 - 64,0	63	20	A 88.177

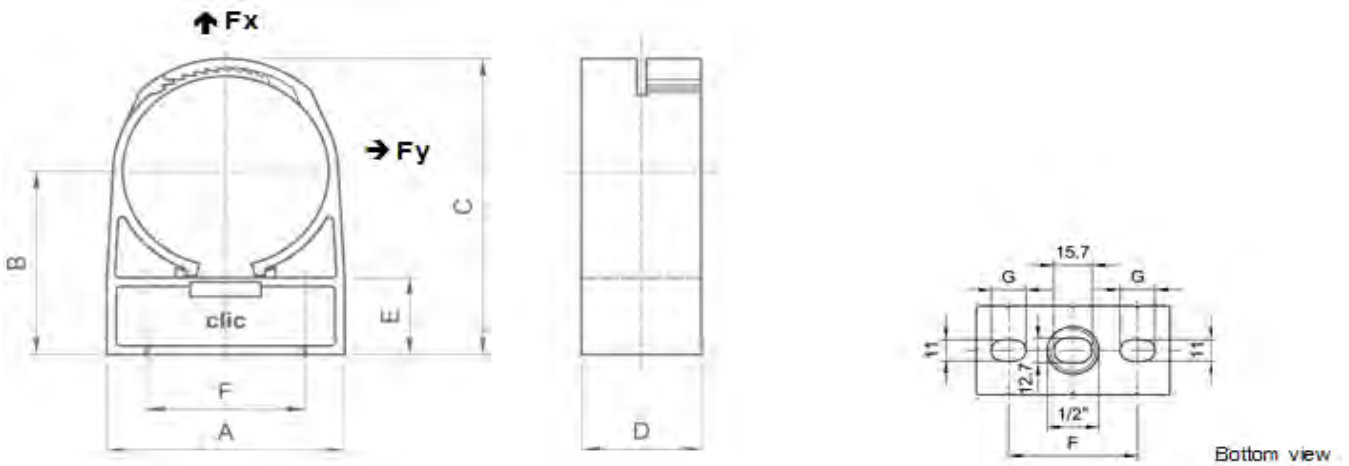


Metric norm = Euro norm NIN 2000

clíc® type selection chart for od 63 - 127mm on pipes or cables

clíc® Type	Steel		Copper	Cast iron	PE	PVC	Cable ducts	Coaxial cable	Certification			Breaking	
	mm	inch	mm	mm	mm	mm	metric	inch			UL	Fx*	Fy*
63					63		63				✓	1440	800
71	76,1	2 ½"	76	78	75	75					✓	1760	1040
80	88,9	3"	89								✓	2080	1280
90					90						✓	2400	1520
101			108	110	110	110					✓	2800	1760
113	114,3	4"	114		125	125					✓	3200	2000

* with 2 screws DIN 571 at +20 °C, safety factor must be considered!

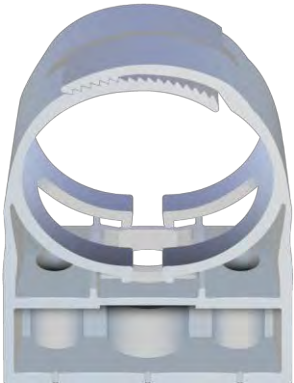


Type	Clamping range min.	Clamping range max.	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]
63	63	71	78	72	115	40	31	52	11
71	71	80	87	77	124	40	31	58	15
80	80	90	98	83	136	40	31	66	16
90	90	101	110	89	148	40	31	76	16
101	101	113	124	96	163	40	31	86	17
113	113	127	139	105	180	40	31	102	17



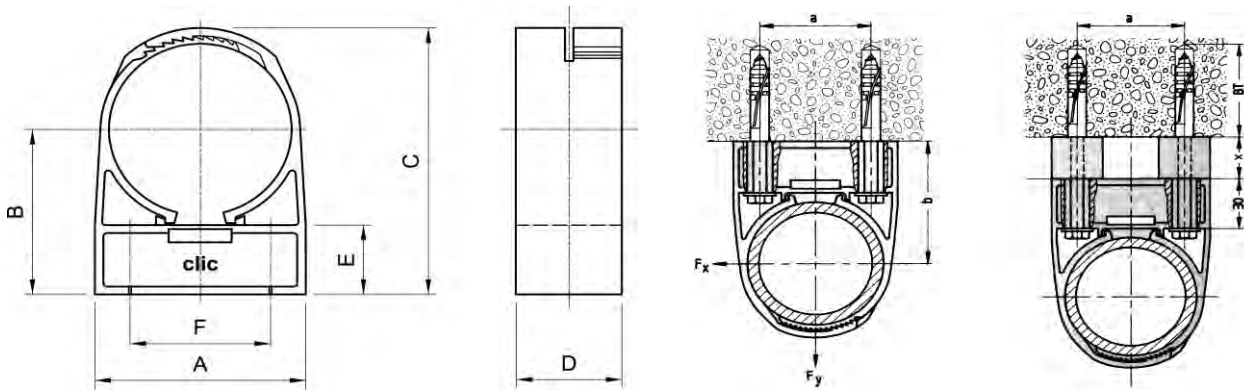
4

CLIC 63-127 mm



- Inhouse installations**
- Chemical industry**
- Electrical installations (cable/conduits)**
- Sanitary installations (cold and hot water pipes)**
- Water supply installations**

Technical information

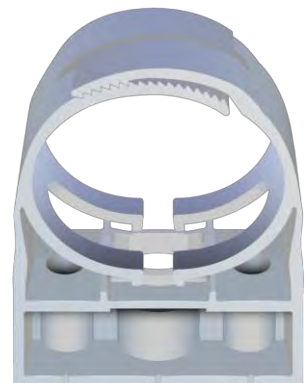


type	A mm	B mm	C mm	D mm	E mm	F mm	safe working load	
							F _y N	F _x N
63	78	72	115	40	31	52	420	240
71	87	77	124	40	31	58	520	310
80	98	83	136	40	31	66	620	380
90	110	89	148	40	31	76	700	450
101	124	96	163	40	31	86	840	520
113	139	105	180	40	31	102	970	590

with screw DIN 96 at + 20 °C, safety factor ~ 3 included
 * Load directions as above

CLIC light grey (RAL 7035), 63-127 mm

type	clamping range Ø mm	pcs/ carton	Item no
63	63 - 71	25	A 88.890
71	71 - 80	40	A 88.891
80	80 - 90	40	A 88.892
90	90 - 101	25	A 88.893
101	101 - 113	25	A 88.894
113	113 - 127	25	A 88.895



Accessories for CLIC size 8-64 mm

CLIC spacer, light grey (RAL 7035)



size	dimension T x B x H mm	pcs/ carton	Item no
2,5	20x24x2,5	100	A 88.260
5	20x24x5	100	A 88.261
15	20x24x15	100	A 88.262
25	20x24x25	100	A 88.263
35	20x24x35	100	A 88.264
45	20x24x45	100	A 88.265
65	20x24x65	50	A 88.266
85	23x30x85	50	A 88.267



4

CLIC base plate for 2 pcs

for CLIC type 8–25

dimension length x depth x height mm	colour	pcs. / carton	Item no
70x20x5	light grey	50	A 88.272



CLIC base plate for 3 pcs

for CLIC type 8–25

dimension length x depth x height mm	colour	pcs/ carton	Item no
110x20x5	light grey	25	A 88.273



DELTA nylon plug

size ¹	length of plug	for wood- screw Ø mm	pcs/ carton	Item no
6	29	3.5-5	100	A 10.102
10	48	6-8	50	A 10.105



¹ Ø drill hole mm

Pan-Head wood screw

with cross slot Z (pozidrive 2 impression), zinc plated yellow passivated

size ¹ mm	pcs/ carton	Item no
3.5x35	200	A 63.303
3,5x40	200	A 63.304
3.5x50	200	A 63.306
4,5x40	200	A 63.323
4,5x45	200	A 63.324
4.5x50	200	A 63.325

¹ Ø x length mm



Round-head wood screw

head T 25 with pressed-on washer, stainless steel A4 (1.4578/AISI 316)

size ¹ mm	thickn. fastened max. mm by mounting with DELTA 6	pcs/ carton	Item no
4.5x40	6	100	A 62.182
4.5x50	16	100	A 62.178
4.5x70	36	100	A 62.184
4.5x80	46	100	A 62.179
4.5x90	56	100	A 62.180
4.5x110	76	100	A 62.181
4.5x125	91	100	A 62.185
4.5x135	101	100	A 62.186

¹ Ø x length mm



4

CLIC flange M 6

for mounting CLIC range 8–59, zinc plated or stainless steel A4 (1.4404/AISI 316)

description	pcs/ carton	Item no
CLIC M6 flange nut zinc plated	100	A 88.130
CLIC M6 flange nut ss A4	100	A 88.240



CLIC flange M 8

for mounting CLIC range 32–59, zinc plated or stainless steel A4 (1.4404/AISI 316)

description	pcs/ carton	Item no
CLIC M8 flange nut zinc plated	100	A 88.285
CLIC M8 flange nut ss A4	100	A 88.286



Double-thread stud M6 and M 8

zinc plated or stainless steel A4 (1.4404/AISI 316)

size ¹ mm	qual.	pcs/ carton	Item no
M6/M6x12	zp	100	B 16.111
M6/M6x12	ss	100	B 16.115



¹ thread x length mm

TILCA flush anchor

zinc plated (zp) or stainless steel A4 (ss) (1.4401/AISI 316)
with DIBt-approval

size ¹ mm	drilling hole Ø×d mm	thread length in mm	qual.	pcs/ carton	Item no
M6x30	8 x 33	13	zp	100	A 42.100
M6x30	8 x 33	13	ss	100	A 42.105
M8x40	10 x 43	20	zp	100	A 42.131
M8x40	10 x 43	20	ss	100	A 42.136



¹ female thread x length of plug mm

TILCA flush anchor setting tool

type	for flush anchor size	Item no
H-M	M6	A 42.110
H-M	M8x40	A 42.117



TILCA Fire-resisting anchor

zinc plated or stainless steel (1.4401/AISI 316)

size ¹ mm	thread length mm	drill Ø×min. depth mm	qual.	pcs/ carton	Item no
6/90	12	6 x 32	zp	100	A 45.810
6/90	12	6 x 32	ss	100	A 45.830



TILCA setting tool

type	Item no
Setting tool for A 45.810 + A 45.830	A 45.873

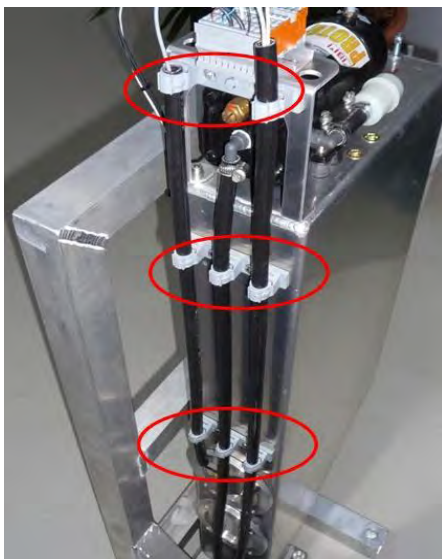


Accessories CLIC 63-127 mm

CLIC flange

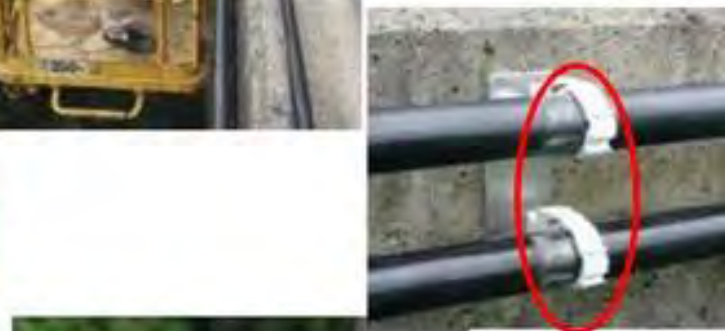
zinc plated and passivated or stainless steel A4
(1.4404/AISI 316)

thread size	dim. l x w x h	qual.	pcs/ carton	Item no
M8	20x20x6	zp	25	A 88.382
M10	20x20x6	zp	25	A 88.381
M10	20x20x6	ss	25	A 88.386





4



Delta nylon spiral dowels

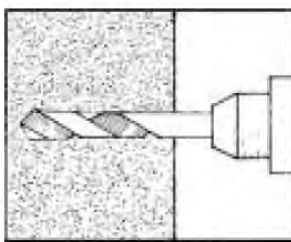


- centric screw guide
- DELTA sashes prevent the dowel from turning
- optimum push-through installation
- uniform expansion in all directions
- the serration grips in any masonry
- resistant to weathering and aging
- dowel made of high-quality nylon
- temperature resistant from -40 to +80 °C

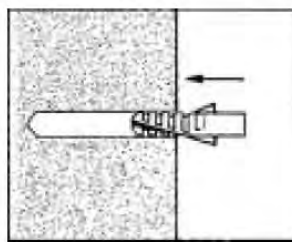
Art.-No.	Description	Ø Drill hole mm	Plug lenght mm	Drill hole depth mm	Ø Srew mm	pcs. per box / pcs per carton box	pcs. per Packing unit
A 10.100	DELTA 4	4	19	25	2.3 - 3	1'000 / 10'000	100
A 10.101	DELTA 5	5	24	30	3 - 4	1'000 / 10'000	100
A 10.102	DELTA 6	6	29	35	3.5 - 5	1'000 / 10'000	100
A 10.103	DELTA 7	7	34	40	4.5 - 5	800 / 6'400	100
A 10.104	DELTA 8	8	38	50	5 - 6	800 / 6'400	100
A 10.105	DELTA 10	10	48	60	6 - 8	400 / 3'200	50
A 10.106	DELTA 12	12	58	70	8 - 10	200 / 1'600	25
A 10.107	DELTA 15	15	75	90	10 - 12	160 / 1'280	20

min. Screw length = plug lenght L + clamping thickbess t fix + Ø screw

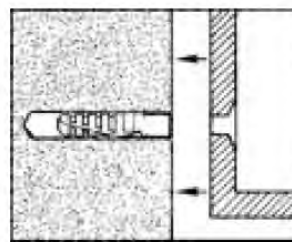
Installation



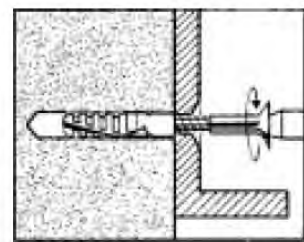
drill a hole



insert plug



mount attachment part

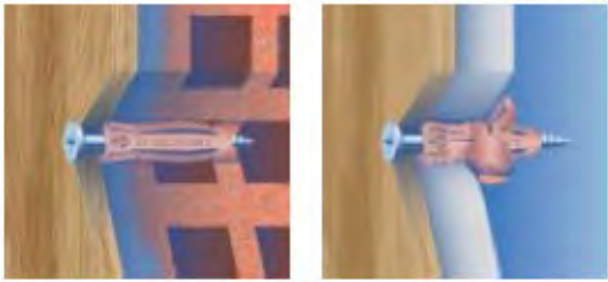


insert screw

Recommended holding value in kN with wood screw	4	5	6	7	8	10	12	15
Wood screw Ø (mm)	3	4	5	5	6	8	10	12
Concrete from C 20/25 (kN)	0.24	0.36	0.55	0.74	0.82	1.40	2.10	4.20
Sand-lime brick KN 15/6 (kN)	0.30	0.42	0.55	0.70	0.82	10.00	1.30	-
Solid brick BV 12/6 (kN)	0.14	0.28	0.44	0.60	0.82	10.00	1.30	-
Brick BN 17.5 (kN)	0.14	0.22	0.26	0.30	0.34	0.36	0.76	1.20
Aerated concrete PL/P (kN)	-	0.05	0.07	0.10	0.12	0.19	0.21	0.38

When using chipboard screws, the values must be reduced by approx. 30-50%.

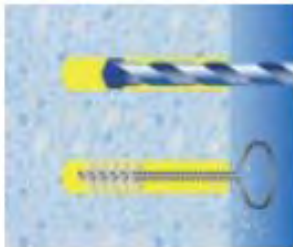
Delta XM Multi-Purpose dowels



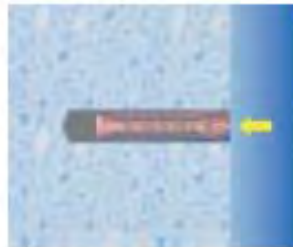
DELTA XM plugs with flange for secure fixings in all substrates.

- With flange for clean drill hole closure
- Useful DELTA XM box for easy handling
- Highest holding values due to 4-fold spread
- Rotation lock in the shaft area, thus no rotation in the drill hole
- Impact protection prevents premature expansion of the anchor
- Resistant to weathering and aging
- Dowel made of best Nylon quality
- Temperature resistant from -40 to +80 °C
- Suitable for through hole mounting
- Suitable for metric screws
- Translated with www.DeepL.com/Translator (free version)

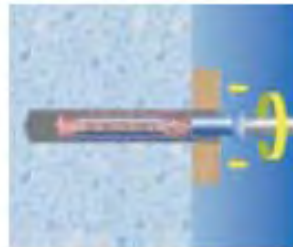
Installation



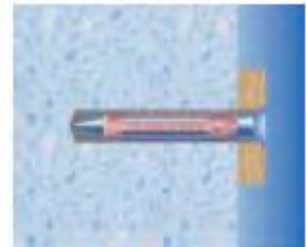
drill a hole



insert dowel



mount attachment part



insert screw

Art.-No.	Description	Ø Drill hole mm	Plug length mm	Drill hole depth mm	Ø screw mm	Metric screw	pcs. per Packing unit
A 10.401	DELTA XM 5	5	25	35	3.0 - 4.0	M 3	200
A 10.402	DELTA XM 6	6	30	40	4.0 - 5.0	M 4	200
A 10.404	DELTA XM 8	8	40	50	4.5 - 6.0	M 5	100
A 10.405	DELTA XM 10	10	50	60	6.0 - 8.0	M 6	50
A 10.406	DELTA XM 12	12	60	70	8.0 - 10.0	M 8	25
A 10.407	DELTA XM 14	14	70	80	10.0 - 12.0	M 10	20

min. Screw length = plug length L + clamping thickness t fix + Ø screw

WECO brass dowels



The proven brass dowel with triple expansion insert

- Stainless, age-resistant brass
- Can be moved to any depth without spacer sleeve
- No special setting tool required



Art.-No.	Description	Ø Drill hole mm	Drill hole depth mm	Plug lenght mm	Metric screw	pcs. per Packing unit
A 22.100	WECO M 4	5.5	30.0	21.0	M 4	100
A 22.101	WECO M 5	7.0	35.0	26.5	M 5	100
A 22.102	WECO M 6	8.0	40.0	30.0	M 6	100
A 22.104	WECO M 8	11.0	50.0	40.0	M 8	100
A 22.105	WECO M 10	14.0	58.0	48.0	M 10	50

5

Installation



drill a hole



Insert dowel with screwed-in screw into drill hole



Spreading the anchor by tightening the screw

Technical data / rec. holding values in kN

	M 4	M 5	M 6	M 8	M 10
Screw lenght (mm)	tfix + (10mm - 15mm)	tfix + (15mm - 20mm)	tfix + (15mm - 20mm)	tfix + (20mm - 30mm)	tfix + (25mm - 35mm)
Min. centre distance (mm)	30	40	40	80	125
Min. edge distance (mm)	30	40	40	80	125
Rec. tractive force C20/25 (kN)	0.2	1.0	1.2	2.3	4.0

K = Clamping force