



NOVI PRO

FASTENING

DAHL //

NOVIPRO offers a wide range of fastening for construction and plumbing installers. The products are of high quality and the range is continually being further developed to suit market needs.



4	SYMBOLS	19	NYLON PLUGS
5	MATERIAL PROPERTIES	20	4-WAY EXPANSION PLUG
6-9	THROUGH BOLT ANCHOR	21	BOARD ANCHORS
10-11	DROP-IN ANCHORS	22	PLUGS FOR PLASTER BOARD
12-13	PLUGS	23	SELF DRILLING SCREWS
14	WEDGE ANCHORS	24	POP RIVETS
15	EXPRESS NAIL	25	TOOLS
16-18	CONCRETE SCREWS		

ALPHABETICAL LISTING

4-Way Expansion Plug	20
Air Pump.....	25
Board Anchors.....	21
Brass Drop-In Anchor.....	11
Concrete Screw.....	16
Concrete Screw BES1-X.....	18
Concrete Screw BES2-X.....	17
Concrete Screw HPZ	17
Drop-In Anchors SA-X.....	10
Express Nail.....	15
Hammerfix Plug	13
Installation Tool for Board Anchor.....	25
Installation Tool for Drop-In Anchors.....	25
Metal Nail Plug.....	12
Nylon Plug.....	19
Plugs for Plaster Board	22
Pop Rivets.....	24
Self-Drilling Screws	23
Through Bolt Anchor A4.....	6
Through Bolt Anchor FZB.....	8
Through Bolt Anchor FZB, ETA option 7	9
Through Bolt Anchor FZV.....	7
Wedge Anchors	14

EXPLANATION OF SYMBOLS



ETA is a technical assessment describing the product characteristics, manufacturing locations and fabrication control. An ETA is the document that permits manufacturers to place the CE mark on their products when they are not covered by a harmonized standard. The manufacturer uses the CE marking to declare that the product is in compliance with the EU's essential health, environmental and safety requirements. All construction products covered by a harmonized standard require CE marking.



Documentation indicating a product's fire safety class. The fire safety class is specified as the number of minutes for which a load-bearing function is retained in the event of fire and is documented by an ETA.



Documentation ensuring that the product fulfils the parameters for withstanding seismic activity. Products are certified for category C1 and/or C2. C1 applies for non-structural systems that do not place the general stability of the building at risk, such as electrical installations, piping, ventilation and heating systems. C2 applies for structural systems such as walls, concrete slabs and concrete and steel beams.

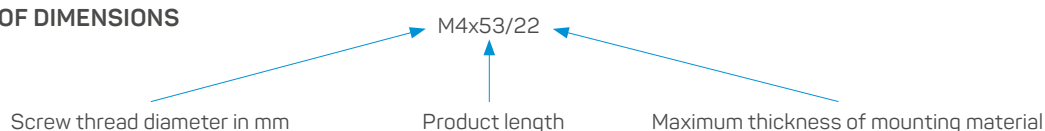


Documentation ensuring that the product fulfils the application guidelines for sprinkler systems on concrete.

ABBREVIATIONS FOR INSTALLATION DIMENSIONS

Abbreviation	Explanation
df mm	Hole diameter in mounting material
d0 mm	Drill diameter
h1 mm	Minimum hole depth
hef mm	Effective depth
hmin mm	Minimum thickness of base material
hnom mm	Installation depth
L mm	Product length
tfix mm	Maximum thickness of mounting material
Tinst Nm	Tightening torque

EXPLANATION OF DIMENSIONS



CORROSIVITY CLASSES

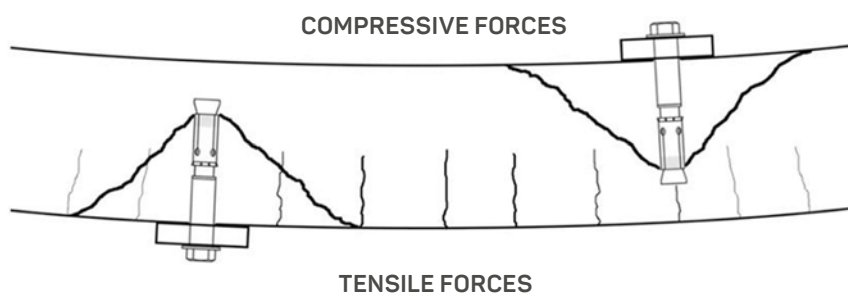
Corrosivity class	Environmental corrosivity	Indoor installation	Outdoor installation
C1	Very low	Heated spaces with dry air and very low air pollution levels, e.g. offices, shops, schools or museums.	Dry or cold areas with very low air pollution levels and low humidity, such as some deserts, the Arctic or Antarctic.
C2	Low	Unheated spaces with variable temperature and humidity and low air pollution levels, e.g. sports halls or warehouses.	Temperate areas with low levels of air pollution. Rural areas. Dry or cold areas with low humidity.
C3	Moderate	Spaces with moderate humidity and a degree of air pollution, e.g. breweries, dairies, laundries or heated ice rinks.	Temperate areas with moderate levels of air pollution or a degree of salt content. Urban areas and lightly industrialized areas.
C4	High	Spaces with high humidity and high air pollution levels, e.g. chemical industries, swimming pools or shipyards.	Temperate areas with significant amounts of air pollution or moderate salt levels, e.g. industrial or coastal areas.
C5	Very high	Permanent condensation of moisture and high levels of air pollutants, e.g. mines, unventilated areas in tropical or subtropical regions.	Temperate and subtropical areas with high levels of air pollution and high salt levels, such as industrial or coastal areas.

QUICK SELECTION GUIDE

	Corrosivity class				
	C1	C2	C3	C4	C5
Dry indoor installation	X				
Indoor installation with occasional humidity		X			
Outdoor installation with very low air pollution		X			
Outdoor installation with low air pollution			X		
Outdoor installation with moderate air pollution				X	
Coastal areas					X
Outdoor installation with industrial air pollution					X
Area close to roads					X

CRACKED CONCRETE

Concrete, even if reinforced, can exhibit small cracks when subjected to tensile forces. The dead weight of the concrete or other loads cause tension in the underside of the concrete slab and compression in the top of the slab. As the cracks limit the load-bearing capacity of the anchor, anchors approved for cracked concrete (ETA Option 1) should be used in structures with cracked concrete.



THROUGH BOLT ANCHOR A4

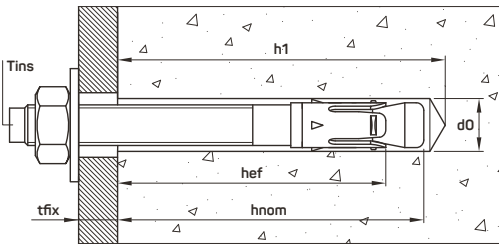
Through bolt anchor, A4 stainless steel, for outdoor environments. ETA option 1 for cracked and uncracked concrete. Installed in solid materials for suspending moderate to heavy loads. The dimensions of the through bolt anchor are given on the product. When the anchor is installed, its length can be verified by the letter on the top (ID).



Item No.	Dimension	ID*	Drill diameter	Hex head	Material	Corrosivity class	Max load
3848106	8x75/9	C	8 mm	SW 13	A4	C5	582 kg
3848107	8x95/29	E	8 mm	SW 13	A4	C5	582 kg
3848108	10x90/10	E	10 mm	SW 17	A4	C5	777 kg
3848109	10x135/55	H	10 mm	SW 17	A4	C5	777 kg
3848110	12x110/14	F	12 mm	SW 19	A4	C5	890 kg

* ID=Identifies stud anchor length with marking on top.

INSTALLATION DIMENSIONS



Item No.	Item No.	Item No.	Item No.	Item No.	Item No.	Item No.	Item No.
3848106	8x75/9	8	15	60	55	48	9
3848107	8x95/29	8	15	60	55	48	29
3848108	10x90/10	10	30	75	68	60	10
3848109	10x135/55	10	30	75	68	60	55
3848110	12x110/14	12	60	85	80	70	14

THROUGH BOLT ANCHOR FZV

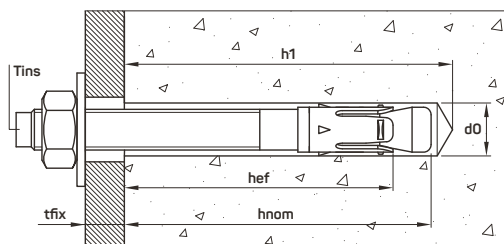
Through bolt anchor, hot galvanized, for indoor and outdoor environments. A4 stainless steel clips. ETA Option 1 for cracked and uncracked concrete (with the exception of three items not covered by ETA/CE/ fire safety class). Installed in solid materials for suspending light to heavy loads. The dimensions of the through bolt anchor are given on the product. When the anchor is installed, its length can be verified by the letter on the top (ID).



Item No.	Dimension	ID*	Drill diameter	Hex head	Material	Corrosivity class	Max load
3848111**	8x60/12	B	8 mm	SW 13	FZV	C4	182 kg
3848112	8x75/9	C	8 mm	SW 13	FZV	C4	364 kg
3848113	8x115/49	E	8 mm	SW 13	FZV	C4	364 kg
3848114**	10x70/5	C	10 mm	SW 17	FZV	C4	364 kg
3848115	10x90/25	E	10 mm	SW 17	FZV	C4	777 kg
3848116	10x135/55	H	10 mm	SW 17	FZV	C4	777 kg
3848117	10x185/105	L	10 mm	SW 17	FZV	C4	777 kg
3848118**	12x80/4	D	12 mm	SW 19	FZV	C4	585 kg
3848119	12x110/14	F	12 mm	SW 19	FZV	C4	1399 kg
3848120	12x130/34	H	12 mm	SW 19	FZV	C4	1399 kg
3848121	12x150/54	I	12 mm	SW 19	FZV	C4	1399 kg
3848122	16x125/8	G	16 mm	SW 24	FZV	C4	1699 kg
3848123	16x145/28	I	16 mm	SW 24	FZV	C4	1699 kg
3848124	16x175/58	K	16 mm	SW 24	FZV	C4	1699 kg

* ID=Identifies stud anchor length with marking on top. ** Item is not covered by ETA/CE/fire safety class.

INSTALLATION DIMENSIONS



Item No.	Dimension	d0 mm	Tinst Nm	h1 mm	hnom mm	hef mm	tfix mm
3848111	8x60/12	8	15	60	55	48	12
3848112	8x75/9	8	15	60	55	48	9
3848113	8x115/49	8	15	60	55	48	49
3848114	10x70/5	10	40	60	53	45	5
3848115	10x90/25	10	40	75	68	60	10
3848116	10x135/55	10	40	75	68	60	55
3848117	10x185/105	10	40	75	68	60	105
3848118	12x80/4	12	60	65	60	50	4
3848119	12x110/14	12	60	85	80	70	14
3848120	12x130/34	12	60	85	80	70	34
3848121	12x150/54	12	60	85	80	70	54
3848122	16x125/8	16	100	105	97	85	8
3848123	16x145/28	16	100	105	97	85	28
3848124	16x175/58	16	100	105	97	85	58

THROUGH BOLT ANCHOR FZB

Through bolt anchor, bright galvanized for indoor environments. Hot-galvanized clips. ETA Option 1 for cracked and uncracked concrete (with the exception of two items not covered by ETA/CE/fire safety class). Installed in solid materials for suspending moderate to heavy loads. The dimensions of the through bolt anchor are given on the product. When the anchor is installed, its length can be verified by the letter on the top (ID).

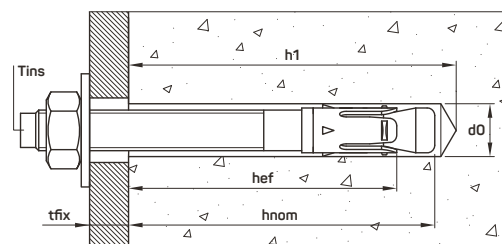


Item No.	Dimension	ID*	Drill diameter	Hex head	Material	Corrosivity class	Max load
3848125**	8x50/2	A	8 mm	SW 13	FZB	C1	182 kg
3848126	8x75/9	C	8 mm	SW 13	FZB	C1	364 kg
3848127	8x95/29	E	8 mm	SW 13	FZB	C1	364 kg
3848128	8x115/49	G	8 mm	SW 13	FZB	C1	364 kg
4450036	8x155/89	J	8 mm	SW13	FZB	C1	641 kg
4450038	10x60/3	B	10 mm	SW 17	FZB	C1	190 kg
4450039	10x70/5	C	10 mm	SW 17	FZB	C1	333 kg
3848129	10x90/10	E	10 mm	SW 17	FZB	C1	777 kg
3848130	10x105/25	F	10 mm	SW 17	FZB	C1	777 kg
3848131	10x135/55	H	10 mm	SW 17	FZB	C1	777 kg
3848132	10x165/85	K	10 mm	SW 17	FZB	C1	777 kg
3848133**	12x80/4	D	12 mm	SW 19	FZB	C1	488 kg
3848134	12x110/14	F	12 mm	SW 19	FZB	C1	1214 kg
3848135	12x130/34	H	12 mm	SW 19	FZB	C1	1214 kg
4450040	12x120/24	G	12 mm	SW 19	FZB	C1	1477 kg
3848136	12x150/54	I	12 mm	SW 19	FZB	C1	1214 kg
3848137	16x145/28	I	16 mm	SW 24	FZB	C1	1699 kg
3848138	16x175/58	K	16 mm	SW 24	FZB	C1	1699 kg

* ID=Identifies stud anchor length with marking on top. ** Item is not covered by ETA/CE/fire safety class.

INSTALLATION DIMENSIONS

Item No.	Dimension	d0 mm	Tinst Nm	h1 mm	hnom mm	hef mm	tfix mm
3848125	8x50/2	8	15	40	37	30	2
3848126	8x75/9	8	15	60	55	48	9
3848127	8x95/29	8	15	60	55	48	29
3848128	8x115/49	8	15	60	55	48	49
4450036	8x155/89	8	15	60	55	48	89
4450038	10x60/3	10	40	60	45	37	3
4450039	10x70/5	10	40	60	53	45	5
3848129	10x90/10	10	40	60	53	45	10
3848130	10x105/25	10	40	75	68	60	25
3848131	10x135/55	10	40	75	68	60	55
3848132	10x165/85	10	40	75	68	60	85
3848133	12x80/4	12	60	65	60	50	4
3848134	12x110/14	12	60	85	80	70	14
3848135	12x130/34	12	60	85	80	70	34
4450040	12x120/24	12	60	85	80	70	24
3848136	12x150/54	12	60	85	80	70	54
3848137	16x145/28	16	100	105	97	85	28
3848138	16x175/58	16	100	105	97	85	58



THROUGH BOLT ANCHOR FZB, ETA OPTION 7

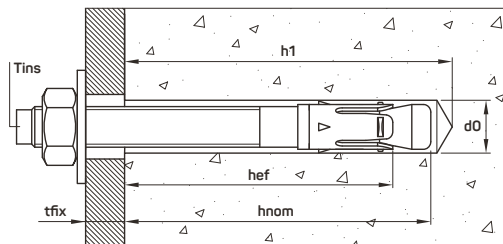
Through bolt anchor, bright galvanized for indoor environments. ETA option 7 for uncracked concrete. Installed in solid materials for suspending moderate to heavy loads. The dimensions of the through bolt anchor are given on the product. When the anchor is installed, its length can be verified by the letter on the top (ID).



Item No.	Dimension	ID*	Drill diameter	Hex head	Material	Corrosivity class	Max load
4450034	8x75/5	C	8 mm	SW 13	FZB	C1	676 kg
4450035	8x90/20	E	8 mm	SW 13	FZB	C1	676 kg
4450032	8x115/45	G	8 mm	SW 13	FZB	C1	922 kg
4450031	10x90/35	C	10 mm	SW 17	FZB	C1	922 kg
4450030	10x120/40	E	10 mm	SW 17	FZB	C1	922 kg

* ID=Identifies stud anchor length with marking on top.

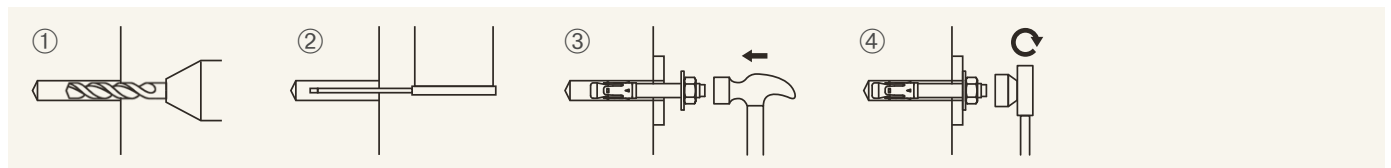
INSTALLATION DIMENSIONS



Item No.	Dimensions	d0 mm	Tinst Nm	h1 mm	hnom mm	hef mm	tfix mm
4450034	8x75/5	8	20	65	60	48	5
4450035	8x90/20	8	20	65	60	48	20
4450032	8x115/45	8	20	65	60	48	45
4450031	10x90/35	10	35	75	67	55	10
4450030	10x120/40	10	35	75	67	55	40

THROUGH BOLT ANCHOR INSTALLATION INSTRUCTIONS

1. Drill based on value given in table of installation dimensions.
2. Use air pump/brush to clean drilling dust from hole.
3. Insert the anchor in the hole until the coloured mark on the anchor is flush with the surface of the concrete. Use a hammer if necessary.
4. Tighten the nut on the anchor to the recommended torque (Nm) in the table of installation dimensions.



DROP-IN ANCHORS SA-X

Drop-in anchor, bright galvanized, for indoor environments. ETA option 7 for uncracked concrete. Approved for anchoring in non-structural systems. Inside thread for metric screws and threaded rods. The drop-in anchor is approved for the installation of sprinkler systems (with the exception of item No. 3824095). The products are installed using NOVIPRO installation tools for drop-in anchors SA-X.

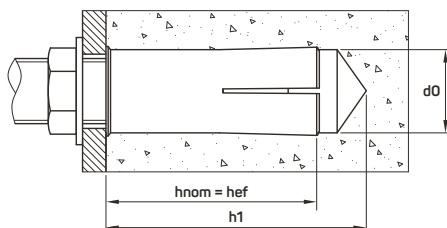


Item No.	Dimension	Drill diameter	Material	Corrosivity class	Max load
3824095*	M6x25	8 mm	FZB	C1	249 kg
3824096	M8x30	10 mm	FZB	C1	327 kg
3824097	M10x40	12 mm	FZB	C1	432 kg
3824098	M12x50	15 mm	FZB	C1	603 kg
3824099	M16x65	20 mm	FZB	C1	894 kg

* This item is not covered by VdS (sprinkler systems).

INSTALLATION DIMENSIONS

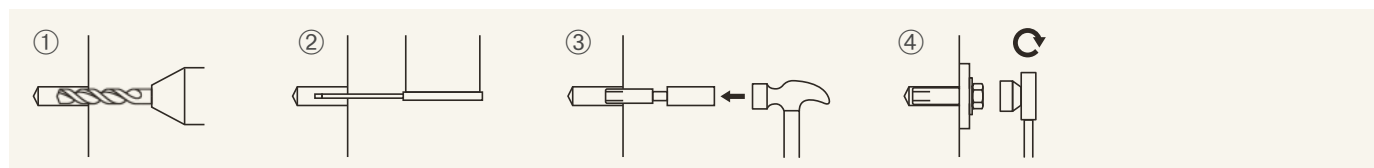
Structural application for concrete and non-structural application for hollow concrete/hollow slabs.



Item No.	Dimensions	d0 mm	Tins Nm	H1 mm	hef	Installation tool
3824095	M6x25	8	4	27	25	3871066
3824096	M8x30	10	11	33	30	3871067
3824097	M10x40	12	17	43	40	3871068
3824098	M12x50	15	38	54	50	3871069
3824099	M16x65	20	60	70	65	3871070

INSTALLATION INSTRUCTIONS

1. Drill based on value given in table of installation dimensions.
2. Use air pump/brush to clean drilling dust from hole.
3. Insert the drop-in anchor in the hole; use installation tool to expand the anchor in the hole. Hammer until the top of the anchor is no longer visible.
4. Use a metric screw and tighten to the recommended torque (Nm) in the table of installation dimensions.



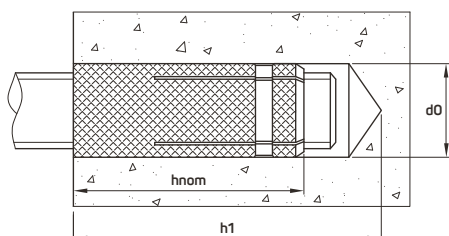
BRASS DROP-IN ANCHOR

Drop-in anchor, brass, for indoor and outdoor environments. With inside metric thread. For installation in concrete, stone and brick. The anchor expands on tightening with a screw or threaded rod.



Item No.	Dimension	Drill diameter	Material	Corrosivity class	Max load
3824101	M8x28	8 mm	Mässing	C2	150 kg
3824102	M10x30	10 mm	Mässing	C2	210 kg

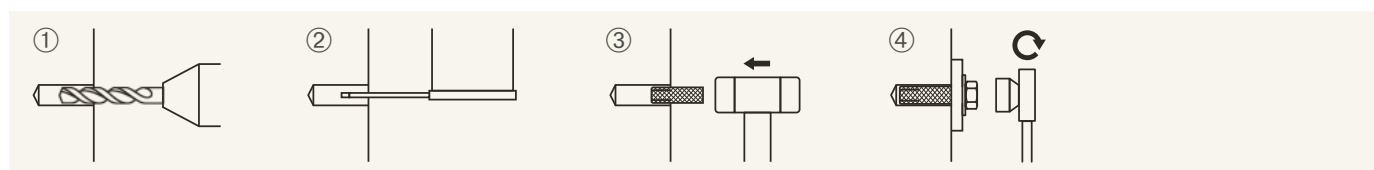
INSTALLATION DIMENSIONS



Item No.	Dimension	d0 mm	h1 mm	hnom mm
3824101	M8x28	10	33	28
3824102	M10x30	12	40	34

INSTALLATION INSTRUCTIONS

1. Drill based on value given in table of installation dimensions.
2. Use air pump/brush to clean drilling dust from hole.
3. Insert anchor in hole; use mallet if necessary.
4. Use a metric screw and tighten to expand and secure the anchor.



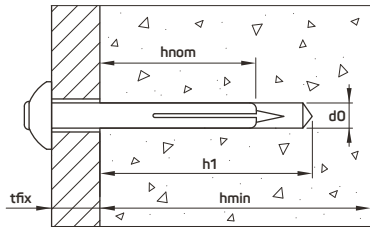
METAL NAIL PLUG

Metal nail plug, zinc. For indoor or occasional outdoor installation. Suggested for installation of sheet metal studs and rails on concrete. The plug expands when the pin is driven in and is secured by the collar on the metal plug.



Item No.	Dimensions	Drill diameter	Corrosivity class
3824104	5x22	5 mm	C1
3824105	6x40	6 mm	C1

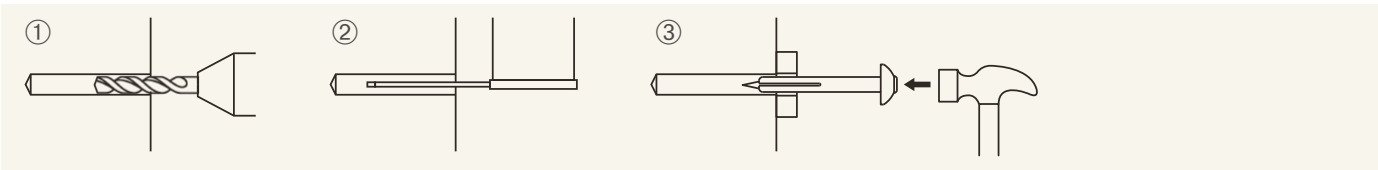
INSTALLATION DIMENSIONS



Item No.	Dimensions	d0 mm	h1 mm	hnom mm	hmin mm	tfix mm
3824104	5x22	5	37	15	100	7
3824105	6x40	6	55	25	100	15

INSTALLATION INSTRUCTIONS

1. Drill based on value given in table of installation dimensions.
2. Use air pump/brush to clean drilling dust from hole.
3. Install the plug in the hole together with the item to be secured and drive the pin in fully.



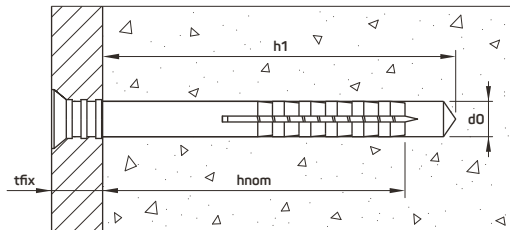
HAMMERFIX PLUG

Hammerfix plug, bright galvanized With countersunk screw head.
Installed in concrete, aerated concrete or brick. The plug expands when the screw is driven in. The screw can be unscrewed and removed.



Item No.	Dimension	Drill diameter	Screw head	Material	Corrosivity class	Max load
3846985	5x50	5 mm	PZ2	FZB	C1	13 kg
3846986	6x40	6 mm	PZ2	FZB	C1	18 kg
3846987	6x60	6 mm	PZ2	FZB	C1	18 kg
3846988	8x80	8 mm	PZ2	FZB	C1	29 kg
3846989	8x100	8 mm	PZ2	FZB	C1	29 kg

INSTALLATION DIMENSIONS

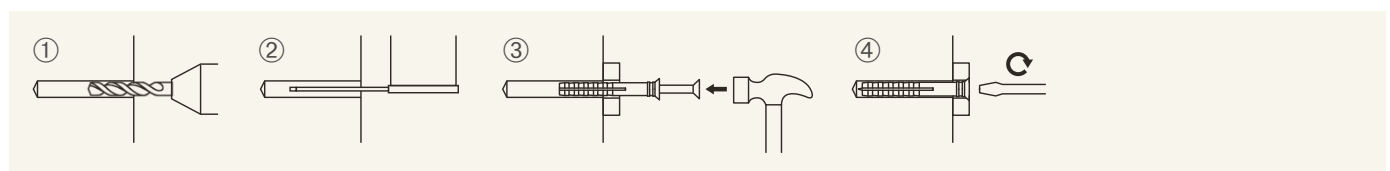


Item No.	Dimension	d0 mm	h1 mm	hnom mm	tfix mm
3846985	5x50	5	30	25	25
3846986	6x40	6	35	25	10
3846987	6x60	6	35	25	30
3846988	8x80	8	45	40	40
3846989	8x100	8	45	40	60

INSTALLATION INSTRUCTIONS

1. Drill based on value given in table of installation dimensions.
2. Use air pump/brush to clean drilling dust from hole.
3. Drive in the plug fully with a hammer.
4. Use a screwdriver if necessary.

A screwdriver is also used for removing the screw.



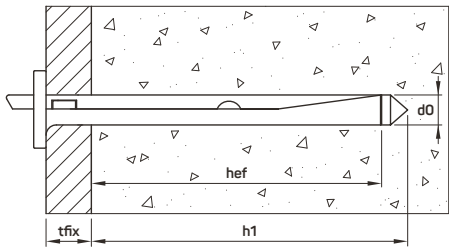
WEDGE ANCHORS

Bright galvanized wedge anchor for indoor installation. ETA approval for non-structural systems. Installed in solid materials for suspending light to moderately heavy loads. Example applications: installing sheet metal studs and perforated strips and hanging ventilation ducts and suspended ceilings.



Item No.	Dimensions	Drill diameter	Material	Corrosivity class
3824094	6x40	6 mm	FZB	C1

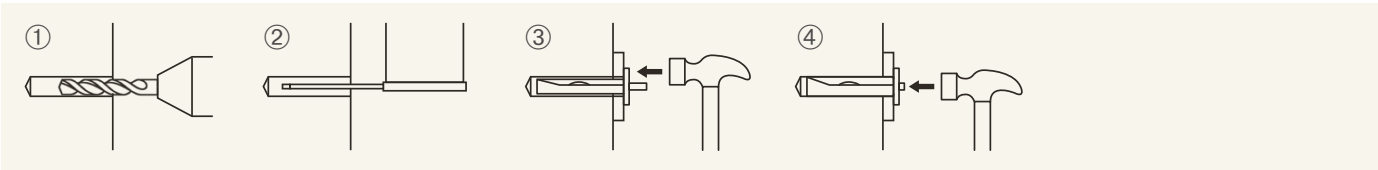
INSTALLATION DIMENSIONS



Item No.	Dimensions	d0 mm	h1 mm	hef mm	tfix mm
3824094	6x40	6	40	32	0-5

INSTALLATION INSTRUCTIONS

1. Drill based on value given in table of installation dimensions.
2. Use air pump/brush to clean drilling dust from hole.
3. Insert wedge anchor in hole; hammer on flat surface on top of product (not on pin).
Note! The product may not expand properly if the pin is driven in.
4. Once the wedge anchor is flush with the concrete surface, drive in the pin to expand the product. The pin shall not project more than 2.5 mm.



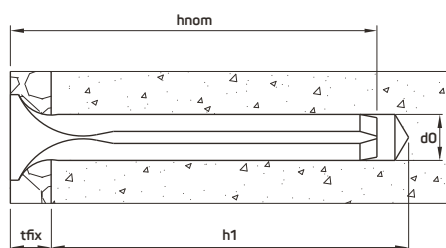
EXPRESS NAIL

Express nail, bright galvanized for easier installation in concrete, brick or natural stone.



Item No.	Dimensions	Drill diameter	Material	Corrosivity class	Max load
3824106	6x60	6 mm	FZB	C1	40 kg

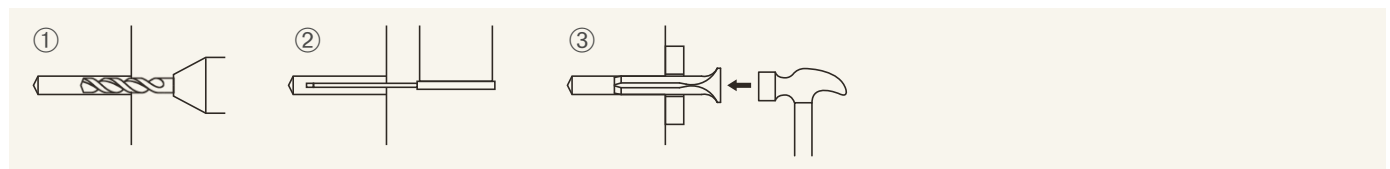
INSTALLATION DIMENSIONS



Item No.	Dimensions	d0 mm	h1 mm	hef mm	tfix mm
3824106	6x60	6	40	30	30

INSTALLATION INSTRUCTIONS

1. Drill based on value given in table of installation dimensions.
2. Use air pump/brush to clean drilling dust from hole.
3. Install the express nail in the hole together with the item to be secured; use hammer to drive the pin in fully.



CONCRETE SCREW

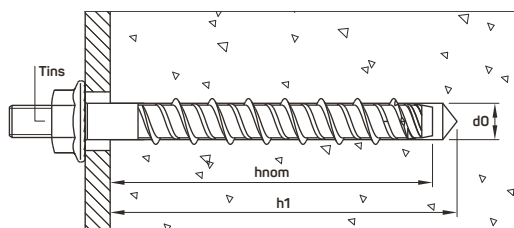
Concrete screw, bright galvanized. ETA option 1 for cracked and uncracked concrete. The concrete screw is approved for installation in environments with high seismic activity (with the exception of item No. 4444138). The concrete screw is installed directly in the hole and cuts into the concrete. The concrete screw handles large loads even for small edge and spacing distances. The screw can be removed and reused. Can be used in concrete, hollow concrete and homogeneous brick. For moderate to heavy loads.



Item No.	Dimension	Drill diameter	Hex head	Material	Corrosivity class	Max load
4444138*	6x40/5	6 mm	SW10	FZB	C1	202 kg
4444139	6x60/5	6 mm	SW10	FZB	C1	673 kg
4444140	6x80/25	6 mm	SW10	FZB	C1	673 kg
4444141	8x70/5	8 mm	SW13	FZB	C1	857 kg

* This item is not covered by the seismic certificate.

INSTALLATION DIMENSIONS



Standard installation depth, tfix						
Item No.	Dimension	tfix mm	H1 mm	d0 mm	tinst Nm	Hnom mm
4444138	-	-	-	-	-	-
4444139	6x60/5	5	65	6	10	55
4444140	6x80/25	25	65	6	10	55
4444141	8x70/5	5	75	8	20	65

Reduced installation depth, tfix						
Item No.	Dimension	tfix mm	H1 mm	d0 mm	tinst Nm	Hnom mm
4444138	6x40/5	5	45	6	10	35
4444139	6x60/5	25	45	6	10	35
4444140	6x80/25	45	45	6	10	35
4444141	8x70/5	20	60	8	20	50

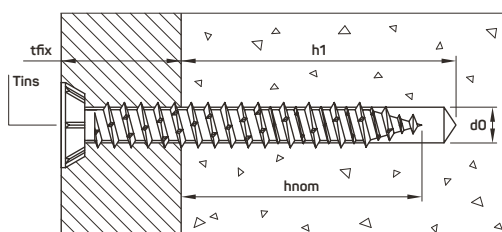
CONCRETE SCREW HPZ

Concrete screw, bright galvanized, for direct installation. The concrete screw is installed directly in the hole and cuts into the concrete. The screw can be removed and reused. Can be used in concrete, hollow concrete and homogeneous brick.



Item No.	Dimension	Drill diameter	Screw head	Material	Corrosivity class	Max load
4443008	7,5x72/40	6 mm	TX30	FZB	C1	90 kg

INSTALLATION DIMENSIONS



Item No.	Dimension	h1 mm	hnom mm	tfix mm	Tins Nm
4443008	7,5x72/40	50	30	40	15

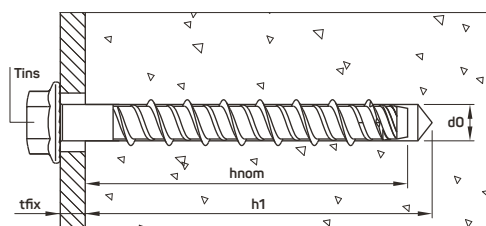
CONCRETE SCREW BES2-X

Concrete screw, bright galvanized. ETA option 1 for cracked and un-cracked concrete. With M8/M10 inside thread. The concrete screw is installed directly in the hole and cuts into the concrete. The concrete screw handles large loads even for small edge and spacing distances. The screw can be removed and reused. Can be used in concrete, hollow concrete and homogeneous brick. For moderate to heavy loads.



Item No.	Dimension	Drill diameter	Hex head	Material	Corrosivity class	Max load
4444142	6x35/M8/M10	6 mm	SW13	FZB	C1	202 kg
4444143	6x55/M8/M10	6 mm	SW13	FZB	C1	673 kg

INSTALLATION DIMENSIONS



Item No.	Dimension	tfix mm	Installation depth, tfix		Tinst Nm	Hnom mm
			H1 mm	d0 mm		
4444142	6x35/M8/M10	-	45	6	10	35
4444143	6x55/M8/M10	-	65	6	10	55

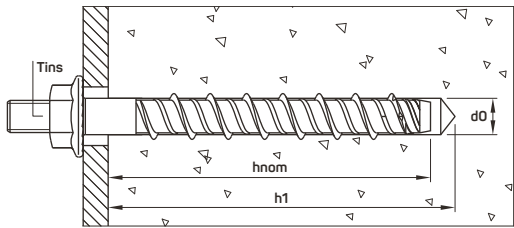
CONCRETE SCREW BES1-X

Concrete screw, bright galvanized. ETA option 1 for cracked and un-cracked concrete. With M10 outside thread. The concrete screw is installed directly in the hole and cuts into the concrete. The concrete screw handles large loads even for small edge and spacing distances. The screw can be removed and reused. Can be used in concrete, hollow concrete and homogeneous brick. For moderate to heavy loads.



Item No.	Dimensions	Drill diameter	Hex head	Material	Corrosivity class	Max load
4444144	6x55/M10	6 mm	SW13	FZB	C1	673 kg

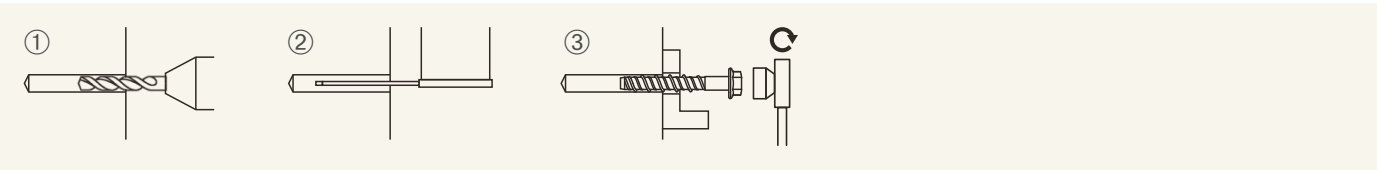
INSTALLATION DIMENSIONS



Item No.	Dimension	tfix mm	Installation depth, tfix		Tinst Nm	Hnom mm
			H1 mm	d0 mm		
4444144	6x55/M10	-	65	6	10	55

CONCRETE SCREW INSTALLATION INSTRUCTIONS

1. Drill based on value given in table of installation dimensions.
2. Use air pump/brush to clean drilling dust from hole.
3. Install the concrete screw together with the item to be secured and tighten to the recommended torque (Nm) in the table of installation dimensions.



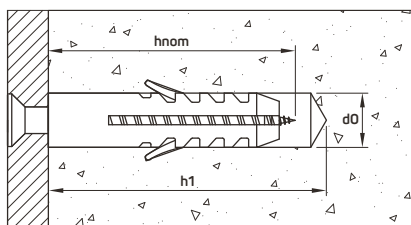
NYLON PLUG

Nylon wall plug without collar, with rotation stop to prevent plug from rotating in hole. For easier installation in concrete, aerated concrete and brick. Sold in whole packages.



Item No.	Dimension	Drill diameter	Max load	Qty/pkg
3845729	6x30	6 mm	30 kg	100
3845730	8x40	8 mm	80 kg	100
3845731	10x50	10 mm	240 kg	50
4450022	12x60	12 mm	75 kg	25
4450023	14x70	14 mm	167 kg	20

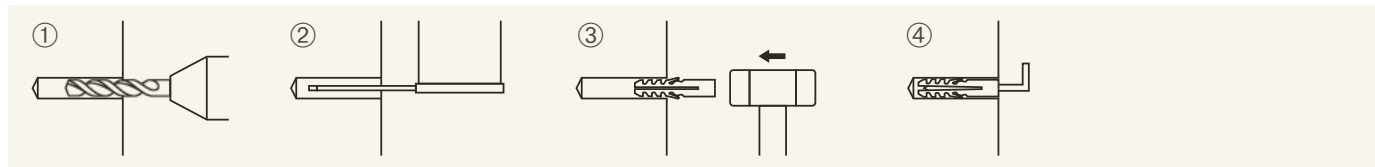
INSTALLATION DIMENSIONS



Item No.	Dimension	d0 mm	Hnom mm	H1	Rec. skrew
3845729	6x30	6	30	40	3,5–4 mm
3845730	8x40	8	40	50	4,5–6 mm
3845731	10x50	10	50	60	6–8 mm
4450022	12x60	12	70	60	8–10
4450023	14x70	14	80	70	10–12

INSTALLATION INSTRUCTIONS

1. Drill based on value given in table of installation dimensions.
2. Use air pump/brush to clean drilling dust from hole.
3. Insert plug in hole. Use a mallet if necessary.
4. Use a suitable screw for the size of the plug for securing.



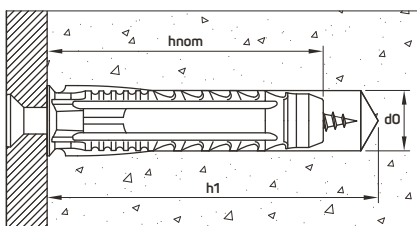
4-WAY EXPANSION PLUG

Nylon plug with 4-way expansion and collar, short or long model. Installation in concrete, aerated concrete, hollow brick and masonry materials. With rotation stop to prevent plug from rotating in hole. Suitable for wood screws and chipboard screws. Sold in whole packages.



Item No.	Dimension	Model	Drill diameter	Max load	Qty/pkg
4450026	5x25	Short	5 mm	28 kg	100
4450027	6x30	Short	6 mm	61 kg	100
3845732	6x45	Long	6 mm	30 kg	100
4450028	8x40	Short	8 mm	170 kg	100
3845733	8x60	Long	8 mm	80 kg	50
4450024	10x50	Short	10 mm	256 kg	50
3845734	10x80	Long	10 mm	240 kg	25
4450025	14x70	Short	14 mm	628 kg	20

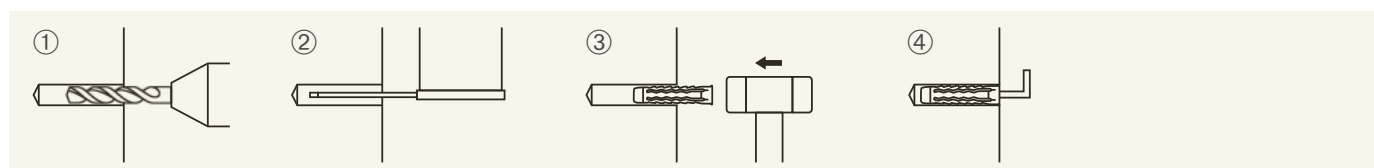
INSTALLATION DIMENSIONS



Item No.	Dimension	d0 mm	Hnom mm	H1	Rec. screw
4450026	5x25	5	28	30	2,5-4 mm
4450027	6x30	6	30	40	4-5 mm
3845732	6x45	6	45	55	3,5-5 mm
4450028	8x40	8	40	50	4-6 mm
3845733	8x60	8	60	70	4-6 mm
4450024	10x50	10	50	60	6-8 mm
3845734	10x80	10	80	90	6-8 mm
4450025	14x70	14	70	80	10-12 mm

INSTALLATION INSTRUCTIONS

1. Drill based on value given in table of installation dimensions.
2. Use air pump/brush to clean drilling dust from hole.
3. Insert plug in hole. Use a mallet if necessary.
4. Use a suitable screw for the size of the plug for securing.



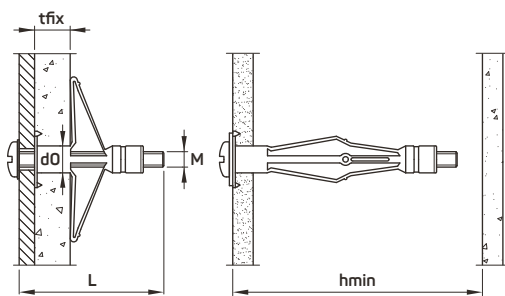
BOARD ANCHORS

Board anchor, bright galvanized, single, double or triple. For installation in sheet materials such as plaster, chipboard or boards. Locking tabs hold the anchor in place in the sheet on tightening. Fibre washer for reduced friction.



Item No.	Dimensions	Drill diameter	Screw head	Grip area	Material	Corrosivity class	Max load
4450041	M4x47/16	8 mm	PH2	9–16 mm (single)	FZB	C1	20 kg
3874254	M4x53/22	8 mm	PH2	15–22 mm (double)	FZB	C1	20 kg
3874255	M5x72/33	10 mm	PH2	16–33 mm (double)	FZB	C1	30 kg
3874256	M5x89/46	10 mm	PH2	33–46 mm (triple)	FZB	C1	30 kg
4450042	M6x59/17	12 mm	PH2	6–17 mm (single)	FZB	C1	30 kg
3874257	M6x72/32	12 mm	PH2	14–32 mm (double)	FZB	C1	25 kg
3874258	M6x89/46	12 mm	PH2	34–46 mm (triple)	FZB	C1	25 kg

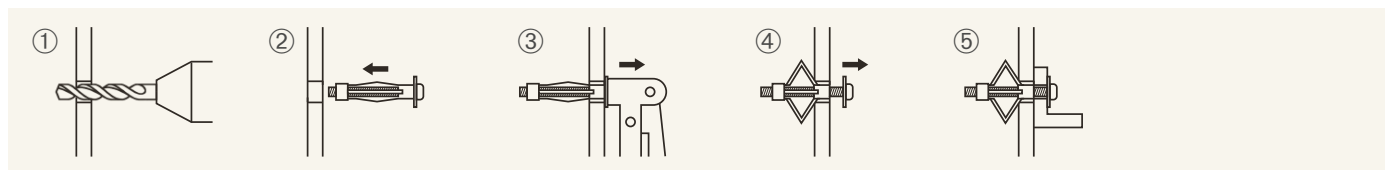
INSTALLATIONSÅTT



Item No.	Dimension	d0 mm	L mm	Hmin mm	tfix mm
4450041	M4x47/16	8	47	9–16	30-hmin
3874254	M4x53/22	8	53	15–22	33-hmin
3874255	M5x72/33	10	72	16–33	55-hmin
3874256	M5x89/46	10	89	33–46	61-hmin
4450042	M6x59/17	10	72	16–33	55-hmin
3874257	M6x72/32	12	72	14–32	49-hmin
3874258	M6x89/46	12	89	34–46	78-hmin

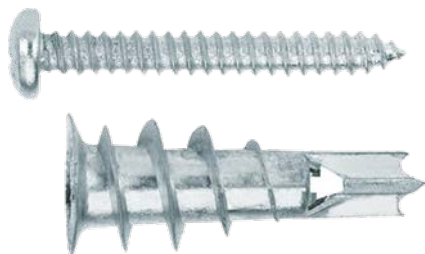
INSTALLATION INSTRUCTIONS

1. Drill based on value given in table of installation dimensions.
2. Insert anchor in hole.
3. Use recommended installation tool to expand anchor. The anchor can also be expanded using a screwdriver.
4. Unscrew the screw after expanding.
5. Attach the item to be secured and retighten the screw. The removable-screw anchor has teeth to minimize the risk of rotation on tightening.



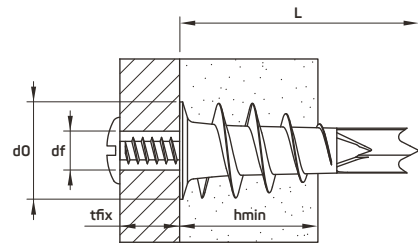
PLUGS FOR PLASTER BOARD

Plugs for plaster board, metal, for installation in plasterboards. The plugs for plaster board is simply screwed directly into the plasterboard with the drill bit. The supplied screw is used on installation. Two variants of screws, max 12 mm wall thickness when using 32 mm screws and max 26 mm wall thickness when using 50 mm screws.



Item No.	Dimension	Screw head	Material	Corrosivity class	Max load
3824103	4,2x32	Phillips	FZB	C1	8 kg
3824112	4,2x50	Phillips	FZB	C1	8 kg

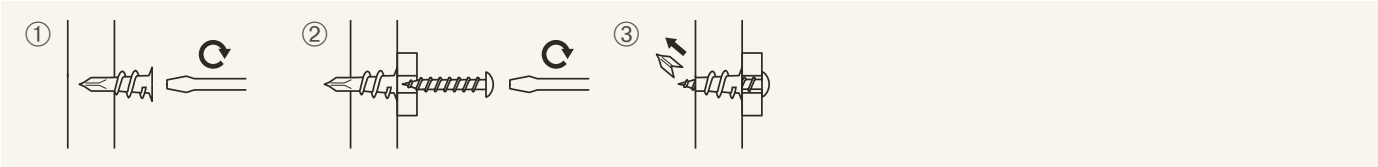
INSTALLATION DIMENSIONS



Item No.	Dimension	D0 mm	L mm	df mm	hmin mm	tfix mm
3824103	4,2x32	13	32	5	9-16	8
3824112	4,2x50	13	32	5	9-16	8

INSTALLATION INSTRUCTIONS

1. Screw in the plugs for plaster board with a screwdriver so that the anchor is flush with the plaster.
2. Secure with the supplied screw.
3. The anchor expands and is secured.



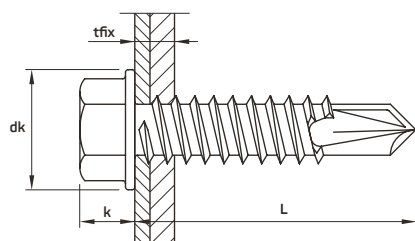
SELF-DRILLING SCREWS

Self-tapping screw with hex head, for sheet metal 0.7–2.25 mm and ventilation ducts.



Item No.	Dimensions	Hex head	Material
4443009	3,5x9,5	SW6	FZB
4443010	4,2x13	SW7	FZB

INSTALLATION DIMENSIONS



Item No.	Dimension	tfix mm	L mm	dk mm	k mm
4443009	3,5x9,5	2,9	9,5	8	3,3
4443010	4,2x13	4,3	13	8,5	4,1

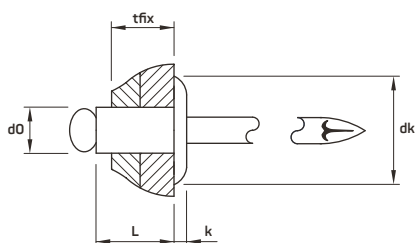
POP RIVETS

Aluminium pop rivet Simple and fast securing of sheet metal. Suitable when fixing from only one side is possible.



Item No.	Dimension	Drill diameter
4453000	3,2x10	3,3
4453003	3,2x12	3,3
4453001	4,0x10	4,1
4453002	4,0x12	4,1

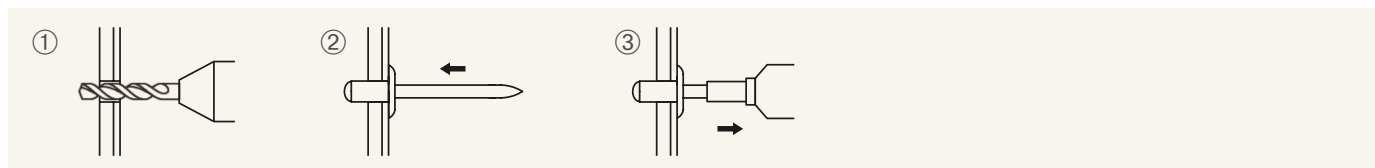
INSTALLATION DIMENSIONS



Item No.	Dimension	d0 mm	tfix mm	dk mm	k mm	L mm
4453000	3,2x10	3,3	5-7	6,2	1,2	10
4453003	3,2x12	3,3	7-9	6,2	1,2	12
4453001	4,0x10	4,1	4-6	7,5	1,5	10
4453002	4,0x12	4,1	6-8	7,5	1,5	12

INSTALLATION INSTRUCTIONS

1. Drill based on value given in table of installation dimensions.
2. Insert the pop rivet in the hole until the collar is flush with the surface.
Note! Do not push; the pop rivet must be loose in the hole.
3. Place the tool over the pop rivet mandrel until it contacts the flange.
Hold the tool vertically upright and install carefully.



AIR PUMP

Air pump for cleaning drilled holes. Used before installation of e.g. chemical anchors, stud anchors and drop-in anchors.



Item No.	Function
3871109	Cleaning drilled holes

INSTALLATION TOOL FOR BOARD ANCHOR

NOVIPRO installation tool for board anchor.



Item No.	Function
3824100	Installation tool for board anchor

INSTALLATION TOOL FOR DROP-IN ANCHORS

Installation tool for NOVIPRO drop-in anchor SA-X.



Item No.	For drop-in anchors
3871066	M6 (3824095)
3871067	M8 (3824096)
3871068	M10 (3824097)
3871069	M12 (3824098)
3871070	M16 (3824099)

[illegible]



Distribueras av SGDS Gruppen
www.sgdsgruppen.se