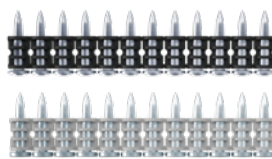# Setting tools FXC 85 and FGC 100.
Quick and easy fixing in concrete and steel.

FXC 85.
Battery-actuated setting tool for quick fixing in concrete and steel.

Work light for **perfect illumination** of the work area.

Simple adjustment of the setting depth to **various applications.**

Interchangeable nose piece for **extended applications.**

The user-friendly nail pusher **simplifies the quick reloading** of new nails.

Unlocking switch for the trigger.

User interface for **status display** of battery and tool.

Removable stand for **optimum fixing in hard-to-reach areas.**

Powerful ProCORE/GBA 18V 4.0Ah Lithium-ion battery for **500 fixings per charge.**

Position for the **utility hook.**

Quick release system ensures a **fast clearance of jammed nails**.

Different nails for a **wide variety of applications**, of which up to 26 nails fit into the standard magazine.

Certification

CE

Advantages, functionality and installation.

The advantages at a glance

· The FXC 85 is a fully battery-actuated setting tool, which ensures correct penetration into the working surface with its setting energy of ~85 joules.
· The elimination of the fuel cell saves on consumption and maintenance costs and also reduces noise.
· The wide range of nails allows application in various materials, including concrete, solid brick, sand-lime brick and steel.
· The user interface on the FXC 85 enables the tool to be switched on/off and serves as a status display for the battery and the tool as well as for resetting the tool.
· With the depth adjustment switch, the nail setting depth can be quickly and easily adjusted to the respective application.
· With service intervals after every 15,000 fixings*, the tool has a long service life.
· The working light supports the setting process, especially in poor lighting conditions.
· The tool is powered by the powerful 18V battery from the Bosch AMP-Share Alliance, making the battery compatible with all AMPShare tools.
· 500 nails can be set with one battery charge and the battery is fully recharged within 65 minutes*.
· The FXC 85 setting tool can optionally be ordered in the practical XL-BOXX , which is compatible with the L-BOXX.

*under standard conditions

Function

· The FXC 85 is suitable for the fast and reliable installation of e.g. drywall rails and electrical installations on floors, ceilings or walls.
· For optimum installation, the tool must be positioned perpendicularly to the work surface.
· The attached stand provides support, but can also be removed to set nails in hard-to-reach areas.
· Quick and easy release of the magazine to remove jammed nails.
· The tool will operate within the temperature range of -5°C to +50°C.
· The tool has the following dimensions: L 405 mm x W 138 mm x H 309 mm.

FGC 100.
Quick and easy fastening in concrete and steel.

Easy nail depth adjustment to adapt for **various applications.**

Interchangeable nose piece for **extended applications.**

Easy nail push button facilitates the **quick nail loading.**

High performance gas fuel cell, which **operates down to -15°C** with more than **1,100 fixings per fuel** cell.

Powerful rechargeable battery with Lithium-ion power and battery-LED status display for **high productivity.**

Adjustable belt hook to right- and left-handed.

Quick release system ensures a **fast clearance of jammed nails.**

Removable stand supports for **optimised fixing.**

Different nails for a **wide range of applications** from which up to 26 nails fit into the standard magazine size or 50 nails into the extended version.

Certification

CE
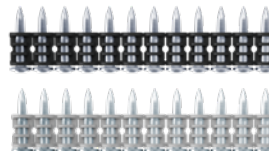
# Advantages, functionality and installation.

Advantages at a glance

· The 100 joules power of the fischer gas actuated fastening tool FGC 100 ensures correct penetration into the working surface without any drilling and dust, even for steel to steel applications.
· An easy nail depth adjustment switch allows to choose how to set the nails – flush or fully embedded for various applications.
· The FGC 100 has a long lifetime and durability with service intervals after every 20,000 fixings.*
· The wide range of nails provides a perfect match for nearly all materials including concrete, solid bricks, sand-lime masonry walls and steel.
· The quick release system enables a fast disassembling of the magazine and clearing of jammed nails.
· Increase in productivity due to the powerful rechargeable battery with Li-ion power that enables more than 8,000 fixings with one charge.*
· With the battery-LED status, the remaining battery power and the status of the tool are displayed. This prevents a standstill at the construction site.
· In case of running out of battery, a 10 minutes charge allows you to shoot at least another 300 nails. To fully charge the battery it takes 90 minutes.*
· The FGC 100 is delivered in the practical XL-BOXX, which is fully compatible with the L-BOXX.

*under standard conditions

Functionality

· The fischer gas actuated fastening tool is suitable for a fast and reliable installation of e. g. drywall tracks and electrical connections in all directions – on floors, walls and ceilings.
· For optimum installation, the tool must be positioned perpendicularly to the working surface. The attached stand gives support but can also be removed to drive nails in narrow areas.
· The tool will operate within the temperature range of -7°C to +50°C.
· The dimensions of the tool are: L 336 mm x W 121 mm x H 404 mm.
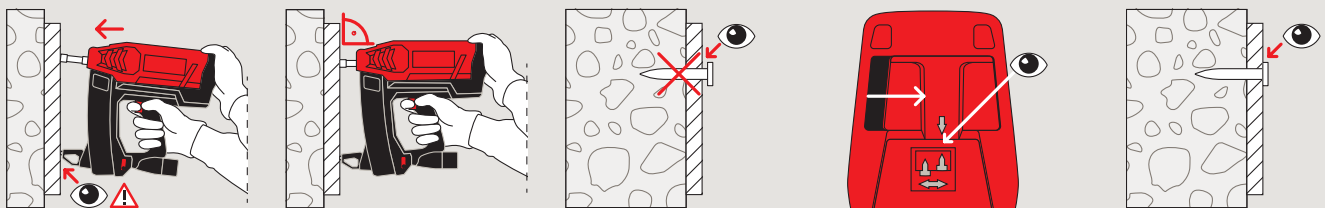
Applications with the FXC 85 and FGC 100.

Drywall rails

For quick and reliable fixing of drywall rails

For fixings even in narrow areas

Electrical installations

For fixing electrical connections, e.g. pipes and electrical cables – on the floor, wall or ceiling

The quick fixing makes it possible to get the job done in a short time. The E-Clips range covers a wide variety of electrical applications

The available interchangeable nose piece allows electrical clips to be plugged in and held for easy and convenient installation

The FXC 85 & FGC 100 is perfect for fixing to ceilings due to its optimal weight balance

Light-duty building constructions

The magnetic clip for the standard nose supports the fixing of washers in light-duty building applications

Composite decks

For temporary tacking of metal composite decks to steel beams

ETIC systems

The special E-Fix nose for the FGC 100 enables fixing of insulation materials

Instructions for use.

Variable embedment depths of fischer DFN/DFNH fixing nails in various materials.
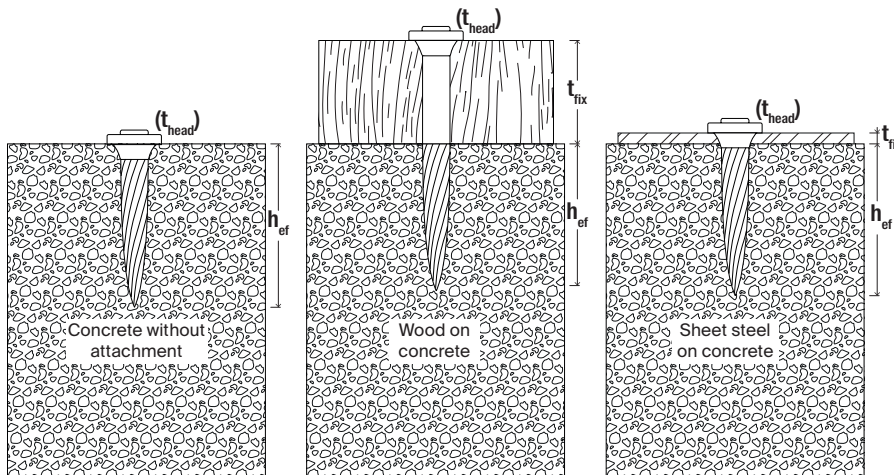
> **i** The nail length is the sum of the thickness of the attachment t_{fix}, the embedment depth h_{ef} and 1.5 mm nailhead height t_{head}*

Concrete without attachment

Wood on concrete

Sheet steel on concrete

Sheet steel on steel

The maximum standard steel sheet thickness that can be fixed to concrete is 2.5 mm.

The embedment depth for maximum loads is ≥20 mm in soft concrete (C20/25) and ≥18 mm in hard concrete (C50/60).
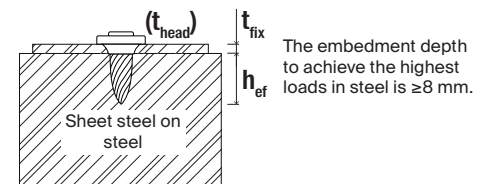
The embedment depth to achieve the highest loads in steel is ≥8 mm.

The embedment depth for maximum loads in solid sand-lime brick is ≥29 mm.
The embedment depth for maximum loads in solid brick is ≥20 mm.
Further information on loads, embedment depths and the optimum selection of fixing solutions can be found in the load table sheet for the FXC 85 and FGC 100.

*Plastic residue from the nail strip could remain between the nail head and the attachment and reduce the embedment depth considerably. This can be ignored when calculating the nail length.

Troubleshooting tips

FXC 85 & FGC 100: What if ...

... the nail penetrates too deeply?
- Reduce the nail setting depth by using the setting depth adjustment switch
- Check the nail length and adjust it to your application if necessary

... the nail does not penetrate deep enough?
- Increase the nail setting depth by using the switch for setting depth adjustment
- Check the nail length and adjust it to your application if necessary
- The substrate is too hard and is only suitable for other fastening methods

... the nail bends?
- Increase the nail setting depth by using the switch for setting depth adjustment
- Check the nail length and adjust it to your application if necessary
- Always position the tool perpendicularly to the work surface

... the nail breaks?
- Increase the nail setting depth by using the switch for setting depth adjustment
- Check the nail length and adjust it to your application if necessary
- Always position the tool perpendicularly to the work surface
- The substrate is too hard and is only suitable for other fastening methods

FXC 85: What if ...

... the tool does not respond?
- Insert a charged battery
- Allow the battery and tool to cool down to operating temperature
- Note the status display on the user interface. More details on this can be found in the operating manual.

FGC 100: What if ... (more on Youtube)

... one fuel cell is not enough to set all the nails in a pack?
- Avoid pressing the tool against the surface without inserting a nail

... no nail is set, but the fan is running?
- Press the drive lever back into the starting position. Use the quick release to remove the magazine and the device nose beforehand
- Insert a new fuel cell

... neither a nail is set nor the fan is running?
- Insert a fully charged battery

Assortment FXC 85

Battery-actuated setting tool FXC 85 + accessories

Setting tool FXC 85   Standard magazine   Charger   Lithium-ion battery   FXC 85 E-Fix nose

Article description	Item No.	Contents	Technical details	Sales unit [piece]
FXC 85 (Single tool in box)	567476	1x fischer battery-actuated setting tool FXC 85 1x standard magazine FXC 85-M26 1x belt hook 1x push bar	~85 joules setting energy, 4.6 kg with battery** Capacity of 26 nails For safe storage when not in use For removing jammed nails	1
FXC 85 (Single tool in the XL-BOXX)	567477	1x fischer battery-actuated setting tool FXC 85 1x standard magazine FXC 85-M26 1x belt hook 1x push bar 1x XL-BOXX	~85 joules setting energy, 4.6 kg with battery** Capacity of 26 nails For safe storage when not in use For removing jammed nails Compatible with the L-BOXX	1
Set FXC 85 (EU)	567478	1x fischer battery-actuated setting tool FXC 85 1x standard magazine FXC 85-M26 1x GAL 18V-40* charger 2x ProCORE 18V 4.0 Ah* lithium-ion battery 1x belt hook 1x push bar 1x XL-BOXX	~85 joules setting energy, 4.6 kg with battery** Capacity of 26 nails Input 230V, max charging current 4A 500 fixings per charge, 4.0 Ah For safe storage when not in use For removing jammed nails Compatible with the L-BOXX	1
Set FXC 85 (US)	571025	1x fischer battery-actuated setting tool FXC 85 1x standard magazine FXC 85-M26 1x GAL 18V-40* charger 2x GBA 18V 4.0 Ah* lithium-ion battery 1x belt hook 1x push bar 1x XL-BOXX	~85 joules setting energy, 4.6 kg with battery** Capacity of 26 nails Input 120V, charging current 4A 500 fixings per charge, 4.0 Ah For safe storage when not in use For removing jammed nails Compatible with the L-BOXX	1
Set FXC 85 (ES)	571026	1x fischer battery-actuated setting tool FXC 85 1x standard magazine FXC 85-M26 1x GAL 18V-40* charger 2x ProCORE 18V 4.0 Ah* lithium-ion battery 1x belt hook 1x push bar 1x XL-BOXX	~85 joules setting energy, 4.6 kg with battery** Capacity of 26 nails Input 230V, max charging current 4A 500 fixings per charge, 4.0 Ah For safe storage when not in use For removing jammed nails Compatible with the L-BOXX	1
Standard magazine	568995	1x standard magazine FXC 85 - M26	Capacity of 26 nails	1
Charger*	568512	1x GAL 18V-40 charger (EU)	Input 230V, max charging current 4A	1
Charger*	572134	1x GAL 18V-40 charger (US)	Input 120V, charging current 4A	1
Lithium-ion battery*	568511	1x ProCORE 18V 4.0 Ah Lithium-ion battery (EU)	500 fixings per charge, 4.0 Ah	1
Lithium-ion battery*	572135	1x GBA 18V 4.0 Ah Lithium-ion battery (US)	500 fixings per charge, 4.0 Ah	1
FXC 85 E-Fix nose	571029	1x FXC 85-N E-Fix	For the use of fischer electrical fixings (plastic) for direct fixing	1

* Country-specific, possibly further country variants
** With 4.0 Ah ProCore/GBA battery

fischer

Assortment FGC 100

Set FGC 100

Article description	Art.-No.	Content description	Content quantity
Set FGC 100 [1]	553411 (EU)	Detailed content in the next table, incl. charging plug for EU	1
	553585 (UK)	Detailed content in the next table, incl. charging plug for UK	1
	553586 (US)	Detailed content in the next table, incl. charging plug for US	1
	553587 (AUS)	Detailed content in the next table, incl. charging plug for AUS	1
	560038 (EU-Schuko) [2]	Detailed content in the next table, incl. Schuko charging plug	1
	560091 (AR)	Detailed content in the next table, incl. charging plug for AR	1

[1] Possibly further variants.
[2] Includes the extended instead of the standard magazine.

The fischer Set FGC 100 includes:

Setting tool FGC 100	Battery charger	Li-Ion battery

Article description	Content quantity	Technical description
fischer gas actuated fastening tool FGC 100	1	100 joules setting energy, 4.1 kg with battery
Magazine FGC 100 – M26*	1	Capacity of 26 nails, curved
Battery charger BC 7.2 V	1	Input 100 – 240 V, Output 8.4 V – 2 A
Li-Ion battery B 7.2 V	2	> 8,000 fixings per charge – at least 2.5 Ah
Push bar	1	For the clearance of jammed nails
Hex wrench	2	–
XL-BOXX	1	Compatible with the L-BOXX

* Art.No. 560038 includes the extended instead of the standard magazine.

Accessories of the fischer gas actuated fastening tool FGC 100

Magazine standard	Magazine extended	Battery charger	Li-Ion battery	FGC 100 E-Fix nose

Article description		Art.-No.	Content [pcs/pkg]	Technical description
Magazine standard	FGC 100 – M26	553412	1	Capacity of 26 nails, curved
Magazine extended	FGC 100 – M50	553717	1	Capacity of 50 nails, curved
Battery charger [1]	BC 7.2 V	553414 (EU) [2]	1	Input 100-240 V, Output 8.4 V – 2 A
	BC 7.2 V	553588 (UK) [2]	1	Input 100-240 V, Output 8.4 V – 2 A
	BC 7.2 V	553589 (US) [2]	1	Input 100-240 V, Output 8.4 V – 2 A
	BC 7.2 V	553590 (AUS) [2]	1	Input 100-240 V, Output 8.4 V – 2 A
	BC 7.2 V	560039 (EU-Schuko) [2]	1	Input 100-240 V, Output 8.4 V – 2 A
	BC 7.2 V	560092 (AR) [2]	1	Input 100-240 V, Output 8.4 V – 2 A
Li-Ion battery	B 7.2 V	553415	1	> 8,000 fixings per charge – at least 2.5 Ah
FGC 100 E-Fix nose	FGC 100-N E-Fix	554869	1	For the use of fischer ETICS plugs TFD 30 and 50 and fischer electrical fixings (plastic) for direct fastening

[1] Possibly further variants.   [2] Country specific charging plug.

Assortment FXC 85 & FGC 100

Assortment for fixings with the fischer setting tools FXC 85 and FGC 100

Standard nails   High performance nails   Magnetic clip   Fuel cell   Cleaning kit

More information:
www.fischer-international.com

Article description		Art.-No.	length [mm]	Technical description	Sales unit [Pcs./pkg]
Standard nails	**DFN 17 NP**	**567321**	17	Zinc-plated with 5µm coating thickness, for soft concrete < C30/37, Shaft diameter 2.6 mm, Nail length 17 mm	1,008
	DFN 20 NP	**567322**	20	Zinc-plated with 5µm coating thickness, for soft concrete < C30/37, Shaft diameter 2.6 mm, Nail length 20 mm	1,008
	DFN 22 NP	**567323**	22	Zinc-plated with 5µm coating thickness, for soft concrete < C30/37, Shaft diameter 2.6 mm, Nail length 22 mm	1,008
	DFN 25 NP	**567324**	25	Zinc-plated with 5µm coating thickness, for soft concrete < C30/37, Shaft diameter 2.6 mm, Nail length 25 mm	1,008
	DFN 30 NP	**567325**	30	Zinc-plated with 5µm coating thickness, for soft concrete < C30/37, Shaft diameter 2.6 mm, Nail length 30 mm	1,008
	DFN 35 NP	**567326**	35	Zinc-plated with 5µm coating thickness, for soft concrete < C30/37, Shaft diameter 2.6 mm, Nail length 35 mm	1,008
	DFN 40 NP	**567327**	40	Zinc-plated with 5µm coating thickness, for soft concrete < C30/37, Shaft diameter 2.6 mm, Nail length 40 mm	1,008
High performance nails	**DFNH 15 NP**	**567328**	15	Zinc-plated with 5µm coating thickness, for hard concrete ≥ C30/37 and steel, Shaft diameter 3.0 mm, Nail length 15 mm	1,008
	DFNH 17 NP	**567329**	17	Zinc-plated with 5µm coating thickness, for hard concrete ≥ C30/37 and steel, Shaft diameter 3.0 mm, Nail length 17 mm	1,008
	DFNH 22 NP	**567330**	22	Zinc-plated with 5µm coating thickness, for hard concrete ≥ C30/37 and steel, Shaft diameter 3.0 mm, Nail length 22 mm	1,008
	DFNH 27 NP	**567331**	27	Zinc-plated with 5µm coating thickness, for hard concrete ≥ C30/37 and steel, Shaft diameter 3.0 mm, Nail length 27 mm	1,008
	DFNH 32 NP	**567332**	32	Zinc-plated with 5µm coating thickness, for hard concrete ≥ C30/37 and steel, Shaft diameter 3.0 mm, Nail length 32 mm	1,008
Magnetic clip	**DF-N magnetic**	**553715**	–	For the use with fischer metal fixings	2
Fuel cell [1]	**FC 165**	**553416**	–	For more than 1,100 fixings	1
Cleaning kit [1]	**FGC 100 cleaning kit**	**553718**	–	150 ml Cleaner, 100 ml Lubricating Oil and tool rubber sealing rings	1

[1] Only to be used with the FGC 100

Accessories

Accessories								

Pipe clip   Cable bow   Cable harness   Fastening tie   Washer   Perforated steel banding   Textile web strapping   ETICS plug

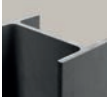| Article description		Item No.	Technical specification [mm]	Length[2] [mm]	Width[2] [mm]	Height[2] [mm]	Material	Sales unit [Pcs./pkg]
Pipe clip[1]	RC 16 DF	572457	ø 16 pipe	34	18.5	29[3]	Plastic RAL7035	100
	RC 20 DF	572458	ø 20 pipe	34	18.5	33[3]	Plastic RAL7035	100
	RC 25 DF	572459	ø 25 pipe	39	18.5	38[3]	Plastic RAL7035	100
	RC 32 DF	572460	ø 32 pipe	45	18.5	45[3]	Plastic RAL7035	50
	RC 40 DF	572461	ø 40 pipe	55	18.5	53[3]	Plastic RAL7035	50
Cable bow[1]	KB 8 DF	572462	8 cables NYM 3 x 1.5	135	20	17	Plastic RAL7035	100
	KB 16 DF	572463	16 cables NYM 3 x 1.5	227	20	17	Plastic RAL7035	50
Cable harness[1]	SHA 20	574612	20 cables NYM 3 x 1.5	102.5	73.5	24	Plastic RAL7035	100
	SHA 40	574613	40 cables NYM 3 x 1.5	132.5	83.5	24	Plastic RAL7035	50
Fastening tie[1]	FF base DF	572464	For cable ties up to 7.6 mm width	24.5	22.5	15.5	Plastic RAL7035	100
	FF 16-32 DF	572465	16 – 32 clamping diameter	24.5	22.5	15.5 + (ø 8 to ø 32)	Plastic RAL7035	100
	FF 32-63 DF	572466	32 – 63 clamping diameter	24.5	25.5	15.5 + (ø 16 to ø 63)	Plastic RAL7035	50
Washer	U-P 20 DF[1]	562323	–	ø 20	–	6	Plastic RAL7035	100
	FGC 100 U	554935	–	ø 25	–	0.8	Metal gvz	1008
Perforated steel banding	LBV 17 DF	572467	21.5 mm hole spacing ø 6,5	10,000	17	0.6	Metal gvz	10
	LBK 19 DF	572468	21.5 mm hole spacing ø 6,5	10,000	19	2.6	Metal gvz with black plastic coating	10
Textile web strapping	GWB	20959	–	10,000	15	1.1	Fabric gray	10
ETICS plug [1] [4]	TFD 30	554928	Insulation thickness 30mm, concrete <C30/37 with DFN 40	ø 60	–	28	Plastic	504
	TFD 50	554929	Insulation thickness 50mm, concrete <C30/37 with DFN 40	ø 60	–	48	Plastic	504

[1] For the electrical fixings (plastic), the E-Fix nose is required.
[2] Dimensions when mounted
[3] Height incl. empty pipe
[4] Only to be used with the FGC 100

Nail selection

Selection guide for various substrates					

	Concrete < C30/37	Concrete ≥ C30/37	Sand-lime brick	Solid brick	Steel
Standard nails DFN	Lengths 17 – 40 mm ●	—	Lengths 17 – 40 mm ●	Lengths 17 – 40 mm ●	—
High performance nails DFNH	Lengths 15 – 32 mm ◐	Lengths 15 – 32 mm ●	Lengths 15 – 32 mm ◐	—	Length 15 mm ●
High performance nails DFNH with E-Clips	Length 22 mm ●	Length 22 mm ●	Length 27 mm ●	Length 22 mm ●	Length 17 mm ●

● Very-well suited   ◐ Partially suited   — Not suited

Loads

Standard nails DFN and high-performance nails DFNH

Recommended loads[1] of a single nail in the respective building material as multiple use with at least 6 nails per attachment part.

Building material	Setting depth h_{ef} [mm]	Recommended tension load [1] F_{rec} [kN]	
		DFN	DFNH
Concrete C20/25[2]	≥ 14	0.10	-
	≥ 16	0.18	-
	≥ 18	0.20	0.22
	≥ 20	0.20	0.50
Concrete C50/60[2]	≥ 14	-	0.12
	≥ 17	-	0.18
	≥ 18	-	0.22
Solid sand-lime brick KS DIN EN 771-2 / KS 16 998 x 200 x 623 mm	≥ 20	0.50	-
	≥ 25	0.68	-
	≥ 27	0.80	-
	≥ 29	0.95	-
Solid brick Mz DIN EN 771-1 / Mz 20, DF	≥ 14	0.10	-
	≥ 16	0.16	-
	≥ 18	0.19	-
	≥ 20	0.19	-
Steel S235JR acc. to EN 10025-2	≥ 8	-	0.96
Member thickness and edge distance for concrete			
Minimum member thickness	h_{min} [mm]	60	60
Minimum edge distance	c_{min} [mm]	70	70
Member thickness and edge distance for steel			
Minimum member thickness	h_{min} [mm]	-	4
Minimum edge distance	c_{min} [mm]	-	14
Maximum fixture thickness			
Wood	t_{fix} [mm]	25	25
Metal sheet	t_{fix} [mm]	2.5	2.5

[1] Required safety factors are considered. Not for safety relevant single point fixings. All visible setting errors must be corrected. Use only in dry areas. To confirm the technical data, setting and load tests are recommended.
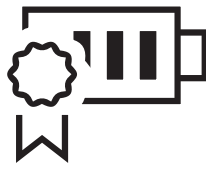
[2] The load values in concrete are valid for tension and shear load.

fischer

Many brands. Many machines. One battery system.

FULL COMPATIBILITY
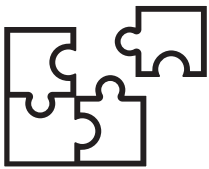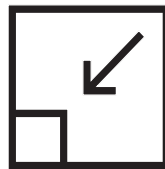
LEADING BATTERY TECHNOLOGY
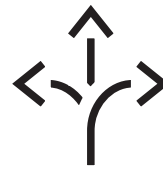
PROFESSIONAL EXPERTISE

SAVE TIME AND MONEY

PLACE AND EFFORT SPARED

A GROWING COMMUNITY

AMPShare is the cross-brand battery system for professionals in trade and industry. With just one shared battery system you can switch flexibly between professional tools and brands – without spending a lot of time. With over 80 million batteries sold and a rapidly growing community, AMPShare is the 18 V battery system of the future. In addition AMPShare tools have been fully compatible with Bosch Professional 18V batteries and chargers since 2008.

More information:
AMPShare.com

All services at a glance.

Guarantee

When you purchase a new tool, you receive 2 years guarantee. If repairs are arising during this period, we will repair or replace your device free of charge. (Does not apply to wearing parts.)

5 years spare parts availability

We guarantee an 5-year availability of spare parts even after production is discontinued.

72 hours repair & return service

Within 72 hours after the fischer Service Center received your tool, it will be repaired maintained and will be delivered back to you.

Repair price limit

After guarantee has expired, the repair price doesn't exceed 50% of the original tool price.

Disposal of old tools

At some point, even the most durable fischer machine has had its day. In this case, please contact your dealer or your fischer contact person for further information regarding the disposal.

Product & application consulting

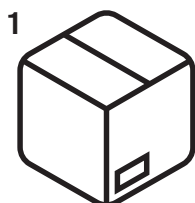Our qualified staff will be happy to answer any questions you may have about fischer products.

Online Services

At **www.fischer-international.com/service** you will find all information about fischer services for our customers.
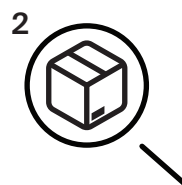
Process of the fischer service.

Pack

1

Remove the fuel cell and nails from your defective tool and put it inside the tool case/ stable shipping carton. Attach the hazardous goods number in accordance with UN3481. Defective battery packs should not be shipped.
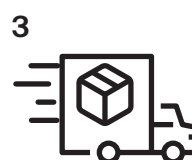
Order return service and documents

2

Please contact your fischer contact person in order to arrange the return service and for all necessary return documents.

Repair

4

Fast repair in the fischer Service Center.
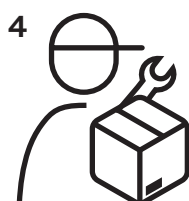
Return shipment

3

You have three options for the return of your tool:
1. Send the tool to the fischer subsidiary.
2. Hand the tool over to your trade partner.
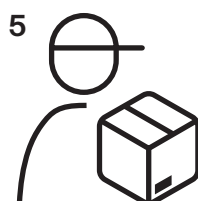3. Arrange a pick-up by the fischer subsidiary.

Shipping

5

Parcel service returns the repaired tool maximum within 72 hours after the fischer Service Center received the tool.

Service

More information about the fischer services:
www.fischer-international.com/service

Dealer:

www.fischer-international.com

fischer stands for

Fixing Systems
fischertechnik
Consulting
Electronic Solutions