

Dealer:

[www.fischer-international.com](http://www.fischer-international.com)



**fischer stands for**

Fixing Systems  
Automotive  
fischertechnik  
Consulting  
Electronic Solutions

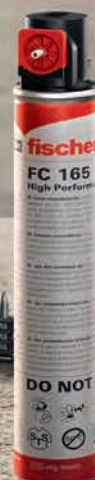
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**fischer** 

**Gas actuated fastening  
tool FGC 100.  
Quick and easy fastening  
in concrete and steel.**



# Quick and easy fastening in concrete and steel.



Interchangeable nose piece for **extended applications**.

Easy nail depth adjustment to adapt for **various 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.



Approval



# Advantages, functionality and installation.

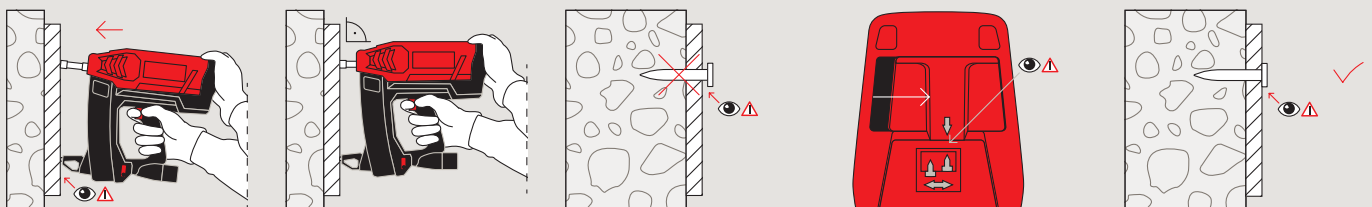
## Advantages at a glance

- 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

## Drywall tracks



For the fast and reliable fixing of drywall tracks



For fixings even in narrow areas

## Electrical installations



For fixings of electrical connections e.g. conduits, pipes and electrical cables in all directions on floors, walls and ceilings



The ability of fixings in fast frequency enables to get the work done quickly



The available EWI-nose enables to pin on and hold electrical clips for an easy and comfortable installation



The FGC 100 has a perfect balance for fixings on ceilings

## Light-duty building construction applications



The magnetic nose piece supplement for the FGC 100 enables installations by driving nails through washers in light-duty building construction applications

## Composite decks



For temporary tacking of composite deck to steel beams

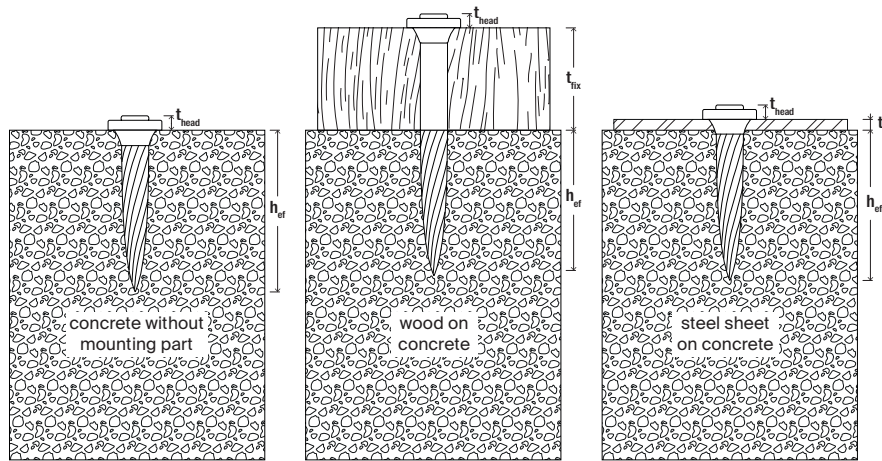
## Insulation systems



The special EWI-nose for the FGC 100 enables fixings of insulation systems

# Tips for using

## Variable embedment depths of the fischer direct fastening nails DFN/DFNH in different materials



The nail length is the sum of the height of the fixing part  $t_{fix}$ , the effective embedment depth  $h_{ef}$  and 1.5 mm height of the nail head  $t_{head}^*$

The maximum standard steel sheet thickness that can be penetrated and fastened on concrete is 2.5 mm.

The embedment depth in soft concrete C20/25 for highest loads is  $\geq 20$  mm and for highest loads in hard concrete C50/60 is  $\geq 18$  mm.

The embedment depth for highest loads in standard steel is  $\geq 8$  mm.

The embedment depth for highest loads in sand lime brick is  $\geq 29$  mm.

The embedment depth for highest loads in solid brick is  $\geq 20$  mm.

For more information to loads, embedment depths and the optimum fastener selection check the load table sheet for the FGC 100.

\*Residual plastic from the nail strip could remain between nail head and mounting part and will shorten the embedment depth  $h_{ef}$ . For the calculation of the nail length this can be neglected.

## What if... Tips for trouble shooting

malfunction during fastening	malfunction of the tool (for further information, please check our videos on youtube)
<p><b>...the nail drives too deep?</b></p> <ul style="list-style-type: none"> <li>· reduce the nail depth by using the easy nail depth adjustment switch</li> <li>· check and if necessary, adjust the length of the nail according to your application</li> </ul>	<p><b>...one fuel cell is not sufficient to fire all nails of one package?</b></p> <ul style="list-style-type: none"> <li>· avoid the pressure of the tool without driving a nail</li> </ul>
<p><b>...the nail does not drive deep enough?</b></p> <ul style="list-style-type: none"> <li>· increase the nail depth by using the easy nail depth adjustment switch</li> <li>· check and if necessary, adjust the length of the nail according to your application</li> <li>· the working surface is too hard and is only suitable for different fastening methods</li> </ul>	<p><b>...no nail is driving, but the fan is running?</b></p> <ul style="list-style-type: none"> <li>· the quick release system helps to remove the magazine and nose piece in order to push back the driving piston to its initial position</li> <li>· insert a new fuel cell</li> </ul>
<p><b>...the nail is bending?</b></p> <ul style="list-style-type: none"> <li>· increase the nail depth by using the easy nail depth adjustment switch</li> <li>· check and if necessary, adjust the length of the nail according to your application</li> <li>· ensure that the tool is perpendicular to the working surface</li> </ul>	<p><b>...neither a nail is driving, nor the fan is running?</b></p> <ul style="list-style-type: none"> <li>· insert a fully charged battery</li> </ul>
<p><b>...the nail is breaking?</b></p> <ul style="list-style-type: none"> <li>· increase the nail depth by using the easy nail depth adjustment switch</li> <li>· check and if necessary, adjust the length of the nail according to your application</li> <li>· ensure that the tool is perpendicular to the working surface</li> <li>· the working surface is too hard and is only suitable for different fastening methods</li> </ul>	

# Assortment and accessories

## fischer Set FGC 100



XL-BOXX

Article description	Art.-No.	Content description	Content quantity
Set FGC 100 <sup>1)</sup>	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) <sup>2)</sup>	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

<sup>1)</sup> Possibly further variants.

<sup>2)</sup> Includes the extended instead of the standard magazine.

### The fischer Set FGC 100 includes:



Tool



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 7.2V	1	Input 100 – 240 V, Output 8.4 V – 2 A
Li-Ion battery B 7.2V	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	Is fully 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

Article description	Art.-No.	Sales unit [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 <sup>1)</sup>	BC 7.2V	553414 (EU) <sup>2)</sup>	1	Input 100-240 V, Output 8.4 V – 2 A
	BC 7.2V	553588 (UK) <sup>2)</sup>	1	Input 100-240 V, Output 8.4 V – 2 A
	BC 7.2V	553589 (US) <sup>2)</sup>	1	Input 100-240 V, Output 8.4 V – 2 A
	BC 7.2V	553590 (AUS) <sup>2)</sup>	1	Input 100-240 V, Output 8.4 V – 2 A
	BC 7.2V	560039 (EU-Schuko) <sup>2)</sup>	1	Input 100-240 V, Output 8.4 V – 2 A
	BC 7.2V	560092 (AR) <sup>2)</sup>	1	Input 100-240 V, Output 8.4 V – 2 A
Li-Ion battery	B 7.2V	553415	1	> 8,000 fixings per charge – at least 2.5 Ah

<sup>1)</sup> Possibly further variants.

<sup>2)</sup> Country specific charging plug.

## Assortment for fixings with the fischer gas actuated fastening tool FGC 100



Fuel cell



Standard nails



High performance nails



EWI plug



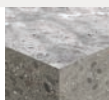
EWI nose



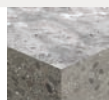
Magnetic nose piece supplement

Article description		Art.-No.	Sales unit [pcs/pkg]	length [mm]	Technical description
Fuel cell	FC 165	553416	1	165	For more than 1,100 fixings
Standard nails	DFN 17	553417	1,008 nails + 1 fuel cell	17	Gvz with 5µm coating thickness, for soft concrete < C30/37, Shaft diameter 2.6 mm, Nail length 17 mm
	DFN 20	553418	1,008 nails + 1 fuel cell	20	Gvz with 5µm coating thickness, for soft concrete < C30/37, Shaft diameter 2.6 mm, Nail length 20 mm
	DFN 22	553419	1,008 nails + 1 fuel cell	22	Gvz with 5µm coating thickness, for soft concrete < C30/37, Shaft diameter 2.6 mm, Nail length 22 mm
	DFN 25	553420	1,008 nails + 1 fuel cell	25	Gvz with 5µm coating thickness, for soft concrete < C30/37, Shaft diameter 2.6 mm, Nail length 25 mm
	DFN 30	553421	1,008 nails + 1 fuel cell	30	Gvz with 5µm coating thickness, for soft concrete < C30/37, Shaft diameter 2.6 mm, Nail length 30 mm
	DFN 32	553422	1,008 nails + 1 fuel cell	32	Gvz with 5µm coating thickness, for soft concrete < C30/37, Shaft diameter 2.6 mm, Nail length 32 mm
	DFN 35	553423	1,008 nails + 1 fuel cell	35	Gvz with 5µm coating thickness, for soft concrete < C30/37, Shaft diameter 2.6 mm, Nail length 35 mm
	DFN 40	553424	1,008 nails + 1 fuel cell	40	Gvz with 5µm coating thickness, for soft concrete < C30/37, Shaft diameter 2.6 mm, Nail length 40 mm
High performance nails	DFNH 15	553425	1,008 nails + 1 fuel cell	15	Gvz with 5µm coating thickness, for hard concrete ≥ C30/37 and steel, Shaft diameter 3.0 mm, Nail length 15 mm
	DFNH 17	553426	1,008 nails + 1 fuel cell	17	Gvz with 5µm coating thickness, for hard concrete ≥ C30/37 and steel, Shaft diameter 3.0 mm, Nail length 17 mm
	DFNH 22	553427	1,008 nails + 1 fuel cell	22	Gvz with 5µm coating thickness, for hard concrete ≥ C30/37 and steel, Shaft diameter 3.0 mm, Nail length 22 mm
	DFNH 27	553428	1,008 nails + 1 fuel cell	27	Gvz with 5µm coating thickness, for hard concrete ≥ C30/37 and steel, Shaft diameter 3.0 mm, Nail length 27 mm
	DFNH 32	553429	1,008 nails + 1 fuel cell	32	Gvz with 5µm coating thickness, for hard concrete ≥ C30/37 and steel, Shaft diameter 3.0 mm, Nail length 32 mm
EWI plugs	TFD 30	554928	504	30	To fix insulation material with a thickness of 30 mm, on soft concrete < C30/37 with DFN 40
	TFD 50	554929	504	50	To fix insulation material with a thickness of 50 mm, on soft concrete < C30/37 with DFN 40
EWI nose	FGC 100 – N EWI	554869	1	–	For the use of fischer EWI plugs TFD 30 and TFD 50
Magnetic nose piece supplement	FGC 100 – N magnetic	553715	2	–	For the use with metal washers
Metal washer	FGC 100 metal washer	554935	1,008	–	It prevents fixture pull-over and is used with the magnetic nose piece supplement to fix wire mesh or membranes.
Cleaning kit	FGC 100 cleaning kit	553718	1	–	150 ml Cleaner, 100 ml Lubricating Oil and tool rubber sealing rings

## Nail selection



concrete &lt; C30/37



hard 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 17 – 32 mm ●	lengths 17 – 32 mm ●	lengths 17 – 32 mm ●	○	length 15 mm ●

● Very-well suited

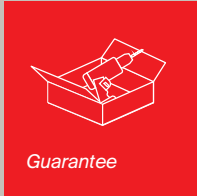
● Partially suited

○ Not suited



# 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.

## 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



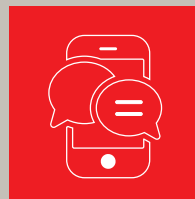
After guarantee has expired, the repair price doesn't exceed 50% of the original tool price.

## 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.

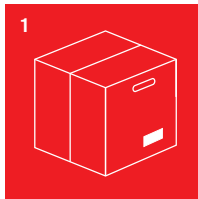
## Online Services



At [www.fischer-international.com/fgc](http://www.fischer-international.com/fgc) 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.



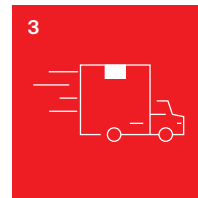
## Repair



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.

More information about the fischer services:  
[www.fischer-international.com/fgc](http://www.fischer-international.com/fgc)



# Loads

## Standard nails DFN and high-performance nails DFNH

Recommended loads<sup>1)</sup> 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 <sup>1)</sup> $F_{rec}$ [kN]	
		DFN	DFNH
Concrete C20/25 <sup>2)</sup>	≥ 14	0.10	-
	≥ 16	0.18	-
	≥ 18	0.20	0.22
	≥ 20	0.20	0.50
Concrete C50/60 <sup>2)</sup>	≥ 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
<b>Member thickness and edge distance for concrete</b>			
Minimum member thickness	$h_{min}$ [mm]	60	60
Minimum edge distance	$c_{min}$ [mm]	70	70
<b>Member thickness and edge distance for steel</b>			
Minimum member thickness	$h_{min}$ [mm]	-	4
Minimum edge distance	$c_{min}$ [mm]	-	14
<b>Maximum fixture thickness</b>			
Wood	$t_{fix}$ [mm]	25	25
Metal sheet	$t_{fix}$ [mm]	2.5	2.5

<sup>1)</sup> 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.

<sup>2)</sup> The load values in concrete are valid for tension and shear load.

# Our 360° service to you.

From software solutions, to training, to personal consulting. As a reliable partner, we are always happy to assist you with words and deeds.



## Your advantages:

- Our products range from chemical resin systems to steel anchors through to nylon anchors.
- Competence and innovation through own research, development and production.
- Global presence and active sales service in over 100 countries.
- Qualified technical consulting for economical and compliant fastening solutions. Also on-site at the construction site if requested.
- Training sessions, some with accreditation, at your premises or at the fischer academy.
- Design and construction software for demanding applications.

# Design Software fischer FiXperience.

The fischer design Software FiXperience gives you safe and reliable support in measuring your projects whether you are a planer, structural engineer or craftsman. Measuring has never been so simple!



## Software and modules for your daily work.

- The modular design program includes engineering software and application modules.
- The software is based on international design standards (ETAG 001, EC1, EC2, EC3 and EC5), including the national application documents. All common force and measurement units are available.
- Incorrect input will be recognized and the software gives tips to get a correct result. This ensures a safe and reliable design every time.
- The graphical display can easily be rotated through 360°, panned, tilted or zoomed as required.
- The 3D display gives a detailed and realistic image.
- The “live update” feature helps to keep the program up to date ensuring you are always working with the latest version.
- Free download and updates at: [www.fischer.de/fixperience-en](http://www.fischer.de/fixperience-en)