



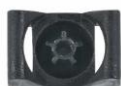
FG60GUN/FG60GUNEL



FG-ABRA



FG-ARAM



FG-BASE



FG-PLET



FG-CL



FG-CLH



FG60GAS



FG-CAEL



FG-IMAN



FG-BAT



FG-CLCAR40



FG-CAR

CHARACTERISTICS

- Direct fixing consisting of nail pressing by means of the energy liberated in a gas combustion
- Instant, autonomous and fast fixings with automatic system.
- Average power and high performance of the battery.
- Belt hook and ladder hook, for comfortable carrying and stand-bys at installations
- 2 years warranty.

BASE MATERIAL



1. RANGE

1.1 GUN

ITEM	CODE	PHOTO	DESCRIPTION
1	FG-GUN		Semiautomatic gas gun for drywall applications on different base materials
2	FG-GUNEL		Semiautomatic gas gun +special nose for electrical accessories

1.2 GUN ACCESSORIES

ITEM	CODE	PHOTO	DESCRIPTION
1	FG-IMAN		Magnet
2	FG-BAT		Battery
3	FG-CAR		Charger
4	FG-GAS		Gas cartridge
5	FG-CAEL		Special nose for electrical accessories
6	FGCLCAR40		Gun charger for 40 nails

1.3 NAILS

ITEM	CODE	PHOTO	SIZES	COVERING	DESCRIPTION
1	FG-CL		From 2,6 x 15 mm to 2,6 x 40 mm		Standard nail
2	FG-CLH		From 3,1 x 15 mm to 3,1 x 32 mm		Hard materials nails

1.4 ACCESORIES

ITEM	CODE	PHOTO	SIZES	MATERIAL	DESCRIPTION
1	FG-PLET		M6 and M8		Threaded rod hanger
2	FG-BASENE		--		Base flange
3	FG-BASEGR		--		Base flange
4	FG-ARAM		Ø25		Metallic rim
5	FG-ABRA15		Ø 15-18		Universal conduit and pipe clip
	FG-ABRA20		Ø 20-25		
	FG-ABRA25		Ø 25-32		

* 2 years warranty

2. CONCRETE GAS-NAILER



LED charge indicator



Gas gun

FG60GUN

- Sturdy case
- 2 Li-Ion batteries
- Charger
- Service instructions
- Allen wrench
- Ear plugs

Gas gun + Special nose

FG60GUNEL

- Sturdy case
- Cannon for electrical sector
- Magnet accessory
- 2 Li-Ion batteries
- Charger
- Service instructions
- Allen wrench
- Ear plugs

Properties:

- High-capacity Li-Ion battery with LED charge indicator
- Light and well balanced
- Adjustable penetration depth
- Levelling foot for 90° nailing

Applications: Laminated plasterboard installers and electrical installations.

TECHNICAL DATA

Dimensions	327mm / 130mm / 385mm
Weight	3.8 kg
Operation mode	Gas cartridge
Security system	Single sequence drive
Battery characteristics	7,2 voltios / 2.500 mAh
Battery charging time	90 minutes
Type of nail	Steel nail
Ø Nails	2,6 – 3,0 mm
Length	15 – 40 mm
Standard nail charger capacity	20 nails
Large nail charger capacity	40 nails
Average number of shots with a fully charged battery	8.000 shots
Average number of shots per gas cartridge	1.200 shots
Emission sound pressure level at work station	L pA, 1s = 101.5 dB
Single shot emission sound pressure level	L pA, 1s = 104.1 dB
Vibration level according to ISO 8662-11	2.83 m/s2

REGULATIONS

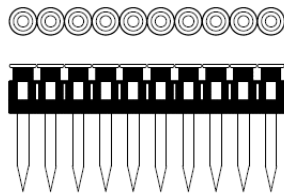
CE conformity
EN 12100:2010
EN 792-13-2000 + A1:2008 for 2006/42/EC directives



3. INSTALLATION DATA

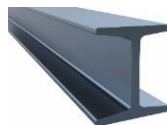
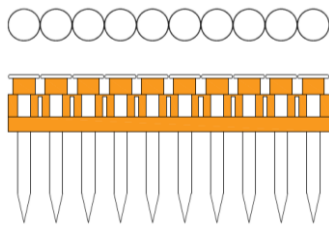
3.1 FG-CL

Standard nail

				Covering	Base material	
						
					Reinforced concrete	Concrete
Installation data						
Code	Ø d (mm)	Ø D (mm)	L (mm)	DRAWING		
FGCL15	2,6	6,3	15			
FGCL20	2,6	6,3	20			
FGCL25	2,6	6,3	25			
FGCL30	2,6	6,3	30			
FGCL35	2,6	6,3	35			
FGCL40	2,6	6,3	40			

3.2 FG-CLH

Hard materials nails

				Covering	Base material		
							
						Zinc plated	IPN beam
Installation data							
Code	Ø d (mm)	Ø D (mm)	L (mm)	DRAWING			
FGCLH15	3,0	6,3	15				
FGCLH17	3,0	6,3	17				
FGCLH19	3,0	6,3	19				
FGCLH22	3,0	6,3	22				
FGCLH27	3,0	6,3	27				
FGCLH32	3,0	6,3	32				

Compatible with nailers: **Index** (models FG60GUN and FG60GUNEL); FOX nailer from **Celo**, BOSS G42 from **Bossong**, CGB3-1 from Berner and CN40-G643E from **KMR**.

3.3 FG-PLET

Threaded rod hanger

		Covering	Base material		
					
		Zinc plated	IPN beam	Reinforced concrete	Concrete
Installation data					
Code	Width (mm)	Thickness (mm)	Maximum recommended load (kg)	Characteristics	
FGPLET	20	1,5	5	Threaded rod hanger for M6 and M8	

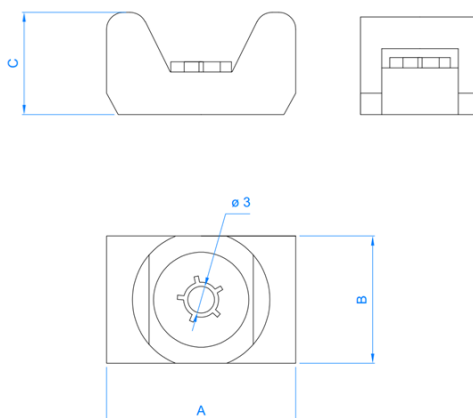
Compatible with nailers: **Index** (models FG60GUN and FG60GUNEL); **Spit** (models: 800E, 27E, 40E), **Fischer** FGC100, **Celo** FOX, **Rawlplug** R-RAWL-SC40II, **Bossong** BOSS G42, **Berner** CGB3-1 and **KMR** CN40-G643E. It is necessary to have the accessory of the magnet of the nailer.

3.4 FG-BASE

Base flange

 		Material	Base material			
						
		Nylon	Steel pipe	Cables	Copper pipe	PVC pipe
Installation data						
Code	ØD [mm]	Dimensions (mm)	Colour	Characteristics		
FGBASENE	3	22,3 x 15 x 12	BLACK	- To hold light steel, copper, plastic and cable pipes. - Resistant to ultraviolet rays, UV. - Material: polyamide.		
FGBASEGR	3	22,3 x 15 x 12	RAL 7035			

DRAWING



Compatible with nails: **Index** (models FG60GUN and FG60GUNEL); **Spit** (models: 800E, 27E, 40E), **Fischer** FGC100, FOX Heat from **Celo**, R-RAWL-SC40II **Rawlplug**, BOSS G42 **Bossong**, CGB3-1 **Berner** and CN40-G643E **KMR**.

3.5 FG-ARAM

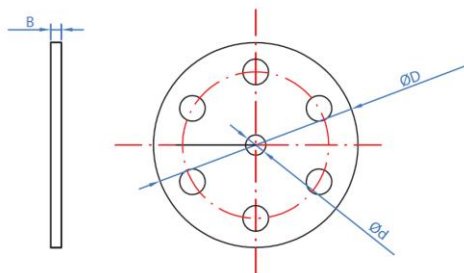
Metal rim for gas gun

	Covering		
			
	Zinc plated	Professional box	Pot of 1000 units

Installation data

Code	ØD [mm]	Ød (mm)	B (mm)	Characteristics
FGARAM25	25	2,6	1,25	- For fixing metal mesh and waterproofing membranes - Increases the support surface to ensure a good grip of the piece to be fixed

DRAWING



Compatible with nails: **Index** (models FG60GUN and FG60GUNEL with FGIMAN accessory); **Spit** (models: 800E, 27E, 40E), **Fischer** FGC100, FOX Heat from **Celo**, R-RAWL-SC40II **Rawlplug**, BOSS G42 **Bossong**, CGB3-1 **Berner** and CN40-G643E **KMR**. It is necessary to have the nail magnet accessory.

3.6 FG-ABRA

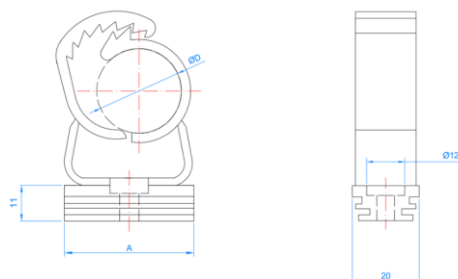
Universal conduit and pipe clip

	Material	Base material			
					
	Nylon	Steel pipe	Cables	Copper pipe	PVC pipe

Installation data

Code	ØD [mm]	Application	Characteristics
FGABRA15	15	For fixing the installation of pipes for water, gas, heating, pneumatics, electricity, air conditioning, etc.	- High thermal resistance (from -40 to +80 °C). - Very safe installations due to its great resistance. - Quick and easy installation (gently press the tube and the clamp closes automatically). - Wide range of installation, from M6 screws, traditional screws, as well as nailable plugs, guides and gas guns.
FGABRA20	20 ÷ 25		
FGABRA25	25 ÷ 32		

DRAWING



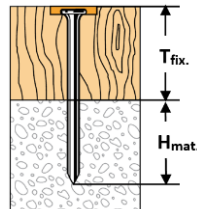
Compatible with nailers: **Index** (model FG60GUNEL); **Spit** (models: 800E, 27E, 40E) and **Fischer** (FGC100 nailer with FGC 100-N EWI barrel).

4. INSTRUCTIONS

4.1 NAIL LENGTH SELECTION

The choice of the length of the nails depends on two aspects: the thickness of the material to be fixed (T_{fix}) and the insertion depth of the nail on the base material (H_{mat}).

$$\text{Total nail's length} = T_{fix} + H_{mat}$$



- If the base material is concrete, we must take into account that a concrete with a greater resistance will oppose a greater resistance to the installation of the nail, so we must choose shorter nail lengths and guarantee a minimum installation depth of the nail over concrete (H_{min}).
- If, on the other hand, the base material is steel, we must be clear that steel will offer greater resistance to the insertion of the nail, and therefore we will not achieve installation depths greater than $6 \div 8$ mm.



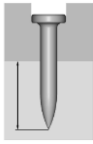
	H_{mat}	
	Concrete	
	FGCLH	FGCL
	[mm]	[mm]
C12/15	25-28	25-28
C20/25	20-22	20-22
C25/30	15-20	15-20
C30/37	15-18	15-18
C40/50	13-16	---
C50/60	12-15	---

L mm	FG-CLH					FG-CL					
	15	17	22	27	32	15	20	25	30	35	40
	●	●	●	●	○						
	●	●	●	●	●						
	○	●	●	●	●	○	○	○	○	○	○
		○	○	○	○	○	●	●	●	●	●
			○	○	○		●	●	●	●	●
				○	○			●	●	●	●

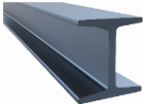
- / ● Valid for
○ / ○ Reduced benefits

4.2 LOADS

H_{min}



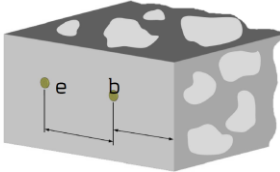
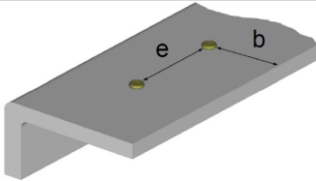
Installation depth (H_{min}) in Concrete/ Steel

Concrete			Steel		
	Hardness	H_{min}		Hardness	H_{min}
	--	[mm]		f_{uk} [N/mm ²]	[mm]
	C16/20	25-28		350	6,5
	C20/25	20-22			
	C25/30	15-20			
	C30/37	15-16		410-450	6,5
	C40/50	13-16			

4.3 RECOMMENDED LOADS

Concrete			Steel		
	Recommended resistance			Recommended resistance	
	H_{min}			H_{min}	
	Tension N_{RK}	Shear V_{RK}		Tension N_{Rec}	Shear V_{Rec}
[mm]	[KN]	[KN]	[mm]	[KN]	[KN]
>20	0,47	0,25	>6,5	1,5	1,2

4.4 INSTALLATION RESTRICTIONS

Steel	Concrete
	
$b \geq 100 \text{ mm}$	$b \geq 10 \text{ mm}$
$e \geq 40 \text{ mm}$	$e \geq 20 \text{ mm}$
b = minimum edge distance e = minimum distances between nails	

* All load values are indicative and depend on marginal conditions, so it is recommended to carry out feasibility tests in the workplace.

** All the elements must be fixed by means of a group of nails, a group of nails is considered when 5 or more nails are used.