



**FG60GUN/FG60GUNEL**



**FG-ABRA**



**FG-BASE**



**FG-ARAM**



**FG-PLET**



**AB-GU**



**AB-MUG**



**FG-IMAN**



**FG-BAT**



**AB-PID**



**FG-CL**



**FG-CLH**



**FG60GAS**



**FG-CAEL**



**FG-CLCAR40**



**FG-CAR**



**OME**

## 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 and 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 ACCESSORIES

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		
6	AB-GU		De Ø 12 a Ø 50 mm		Guide clamp with M6 thread
7	AB-MUG		De Ø 12 a Ø 50 mm		Guide clamp and lock
8	AB-PID		De 16 x 1mm hasta 32 x 1,2 mm		Clip clamp
9	OME		--		Universal anchor

\* 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 cartidge	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





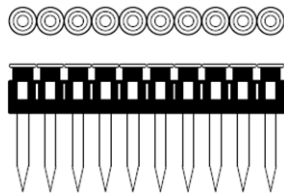
## REGULATIONS

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

### 3. INSTALLATION DATA



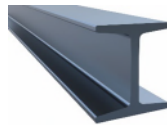


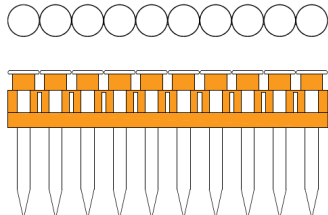
#### 3.1 FG-CL

#### 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



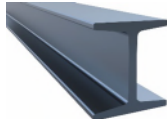


#### Hard materials nails

				Covering	Base material		
							
					Zinc plated	IPN beam	Reinforced concrete
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



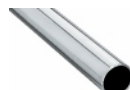

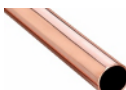

#### Threaded rod hanger

			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	<ul style="list-style-type: none"><li>Threaded rod hanger for M6 and M8</li></ul>			

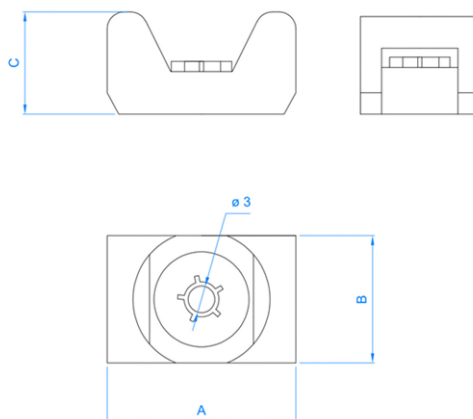
Compatible with nailers: **Index** (models FG60GUN and FG60GUNEL); **Spit** (models: 800E, 27E, 40E), **Fischer** FGC100, **Celo** FOX, **Rawlplug** R-RAWL-SC40II, **Bossong** BOSS G42, **Berner** CGB3-1 and **KMR** CN40-G643E. It is necessary to have the accessory of the magnet of the nailer.

### 3.4 FG-BASE

#### Base flange

		Material	Base material			
						
		Nylon	Steel pipes	Wires	Copper pipes	PVC pipes
Installation data						
Code	ØD [mm]	Dimensions (mm)	Colour	Characteristics		
FGBASENE	3	22,3 x 15 x 12	BLACK	<ul style="list-style-type: none"><li>To hold light steel, copper, plastic and cable pipes.</li><li>Resistant to ultraviolet rays, UV.</li><li>Material: polyamide.</li></ul>		
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

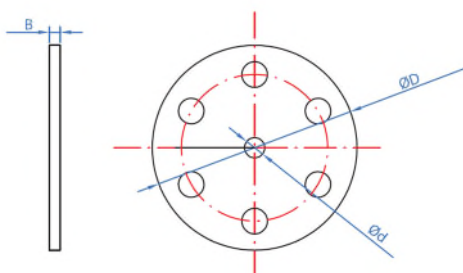
#### Metal rim for gas gun

	Covering	Formats	
			
	Zinc plated	Professional box	Pot of 1000 units

#### Installation data

Code	ØD [mm]	Ød (mm)	B (mm)	Characteristics
FGARAM25	25	2,6	1,25	<ul style="list-style-type: none"> <li>For fixing metal mesh and waterproofing membranes</li> <li>Increases the support surface to ensure a good grip of the piece to be fixed</li> </ul>

#### 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

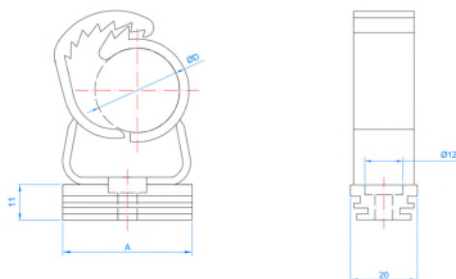
#### Universal conduit and pipe clip

	Material	Base material			
					
	Nylon	Steel pipes	Wires	Copper pipes	PVC pipes

#### Installation data

Code	ØD [mm]	Application	Characteristics
FGABRA15	15	<ul style="list-style-type: none"> <li>For fixing the installation of pipes for water, gas, heating, pneumatics, electricity, air conditioning, etc.</li> </ul>	<ul style="list-style-type: none"> <li>High thermal resistance (from -40 to +80 °C).</li> <li>Very safe installations due to its great resistance.</li> <li>Quick and easy installation (gently press the tube and the clamp closes automatically).</li> <li>Wide range of installation, from M6 screws, traditional screws, as well as nailable plugs, guides and gas guns.</li> </ul>
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).

## 3.7 AB-GU

### Guide clamp with M6 thread



#### Material



Polypropylene

#### Base material



Steel pipes



Wires



Copper pipes

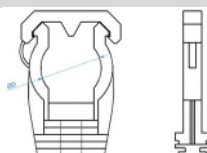


PVC pipes

#### Installation data

Code	ØD [mm]	Ø D (")	Maximum recommended load (kg)	Characteristics
ABGUG12	12	1/4	40	<ul style="list-style-type: none"> <li>Lock at the top for higher safety.</li> <li>Pressure fixation.</li> <li>For pipes ranging from Ø12 mm up to Ø50 mm.</li> <li>Meant for holding light steel pipes, copper and PVC pipes and y wires.</li> <li>Working temperature range from -40°C to +80°C.</li> <li>Resistant to ultraviolet radiation.</li> <li>Material: Polypropylene.</li> <li>Halogen-free material.</li> <li>White version.</li> </ul>
ABGUG15	15	3/8	40	
ABGUG18	18	--	40	
ABGUG 20	20	--	40	
ABGUG22	22	1/2	40	
ABGUG25	25	--	40	
ABGUG28	28	--	40	
ABGUG32	32	1	40	
ABGUG40	40	--	40	
ABGUG50	50	--	40	

#### DRAWING



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

## 3.8 AB-MUG

### Guide clamp and lock



#### Material



Polypropylene

#### Base material



Steel pipes



Wires



Copper pipes

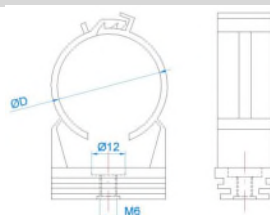


PVC pipes

#### Installation data

Code	ØD [mm]	Ø D (")	Maximum recommended load (kg)	Characteristics
ABMUG12	12	1/4	40	<ul style="list-style-type: none"> <li>With pre-threaded M6 and fast lock.</li> <li>For parallel mounting.</li> <li>Pressure fixation.</li> <li>For pipes ranging from Ø15 mm up to Ø28 mm.</li> <li>Meant for holding light steel pipes, copper and PVC pipes and y wires.</li> <li>Working temperature range from -40°C to +80°C.</li> <li>Resistant to ultraviolet radiation.</li> <li>Material: Polypropylene.</li> <li>Halogen-free material.</li> <li>White version.</li> </ul>
ABMUG15	15 ÷ 16	3/8	40	
ABMUG18	18 ÷ 20	--	40	
ABMUG22	22 ÷ 25	--	40	
ABMUG26	26 ÷ 28	1/2	40	
ABMUG32	32 ÷ 35	--	40	
ABMUG40	40 ÷ 42	--	40	
ABMUG48	48 ÷ 50	3/4	40	

#### DRAWING



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



### 3.9 AB-PID

#### Clip clamp

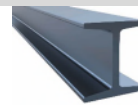


#### Covering



Zinc plated

#### Base material



Viga IPN

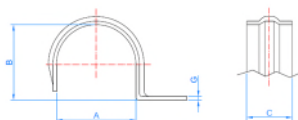


Chapa

#### Installation data

Code	A (mm)	B (mm)	C (mm)	G (mm)	Characteristics
ABPID16	16	15	12	1	<ul style="list-style-type: none"> <li>From 16Ø up to Ø32</li> </ul>
ABPID20	20	19	12	1,2	
ABPID25	25	23,8	15	1,2	
ABPID32	32	30,8	15	1,2	

#### 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.

### 3.10 OME

#### Universal anchor



#### Covering



Atlantis C2-L ≥ 7 µm

#### Base material



Tubo Acero



Cables



Tubo Cobre

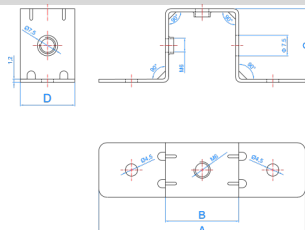


Tubo PVC

#### Installation data

Code	A	B	C	D	Characteristics
OMEM06	76	27	27	20	<ul style="list-style-type: none"> <li>Omega for ceiling mounting.</li> <li>For hanging threaded rods.</li> <li>Two M6 threads.</li> <li>Through-hole on the side.</li> <li>Complies with EN 13964:2006.</li> </ul>

#### 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.

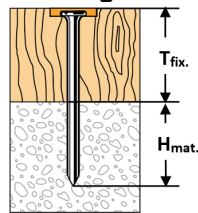
## 4. INSTRUCTIONS

### 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 ( $H_{mat}$ ).

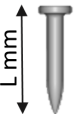








$$\text{Total nail's length} = T_{fix} + H_{mat}$$



- 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÷8 mm.



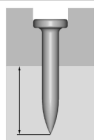
Concrete	$H_{mat}$	
	FGCLH [mm]	FGCL [mm]
C12/15	25-28	25-28
C20/25	20-22	20-22
C25/30	15-20	15-20
C30/37	15-18	15-18
C40/50	13-16	---
C50/60	12-15	---

	 FG-CLH					 FG-CL					
	15	17	22	27	32	15	20	25	30	35	40
	●	●	●	●	○						
	●	●	●	●	●						
 <C50/60	○	●	●	●	●	○	○	○	○	○	○
 C20/25		○	○	○	○	○	●	●	●	●	●
			○	○	○		●	●	●	●	●
				○	○			●	●	●	●


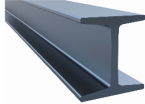
- / ● Valid for  
 ○ / ○ Reduced benefits

## 4.2 LOADS



$H_{min}$



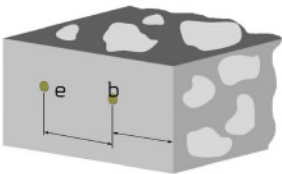
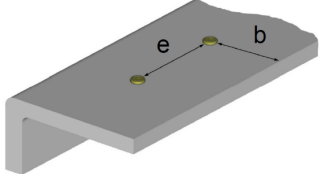
Installation depth ( $H_{min}$ ) in Concrete/ Steel

Concrete			Steel		
	Hardness	$H_{min}$		Hardness	$H_{min}$
	--	[mm]		$f_{uk}$ [N/mm <sup>2</sup> ]	[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
	
$b \geq 100$ mm	$b \geq 10$ mm
$e \geq 40$ mm	$e \geq 20$ mm
<p>b = minimum edge distance</p> <p>e = minimum distances between nails</p>	

\* 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.