

# Gervall



**INSTANTANEOUS SAFETY GEAR**

**MODEL M255 M256**



**TECHNICAL DOSSIER**



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## 1. TECHNICAL CHARACTERISTICS.

**Weigh for pair:** 4,6 Kg.

**Guide:** Cold drawn (A) rail thickness:  
 from 8 to 15 mm M255.  
 16 mm M256

Machined rail (B) thickness:  
 from 9 to 15 mm M255  
 16 mm M256

**Maximum rated speed:** Car: 0,63 m/seg.  
 Counterweight: 1,00 m/seg. Only if it is activated by a cable loosening element. If the parachute is operated with a overspeed governor, the maximum speed of actuation will be 1.00 m / s.

**Plane of general dimensions (N ° Plane):** 255-1001A  
 255-1001B

### 1.1 COLD DRAWN (A)

GUIDE RAIL THICKNESS	MAXIMUM RATED SPEED (m/s)		MAXIMUM OVERSPEED GOVERNOR TRIPPING SPEED (m/s)		PERMISSIBLE MASS (P+Q) Kg.	
	mm.	Cabin	Counterweight	Cabin	Counterweight	Cabin
8	0,63	1,00	1,00	1,00	1.830	1.728
De 9 a 15	0,63	1,00	1,00	1,00	2.330	2.200
16	0,63	1,00	1,00	1,00	2.575	2.432

CAR FRAME (P+Q) Kg.				
MAXIMUM OVERSPEED GOVERNOR TRIPPING SPEED (m/s)	0,30	2459	3131	3461
	0,40	2396	3050	3371
	0,50	2321	2955	3266
	0,60	2233	2843	3142
	0,80	2037	2594	2866
	1,00	1830	2330	2575
GUIDE RAIL THICKNESS (mm)		8	9 a 15	16

## 1.2 MACHINED (B)

GUIDE RAIL THICKNESS	MAXIMUM RATED SPEED (m/s)		MAXIMUM OVERSPEED GOVERNOR TRIPPING SPEED (m/s)		PERMISSIBLE MASS (P+Q) Kg.	
	Cabin	Counterweight	Cabin	Counterweight	Cabin	Counterweight
De 9 a 15	0,63	1,00	1,00	1,00	3.238	3.057
16	0,63	1,00	1,00	1,00	3.962	3.740

CAR FRAME (P+Q) Kg.			
MAXIMUM OVERSPEED GOVERNOR TRIPPING SPEED (m/s)	0,30	4354	5327
	0,40	4241	5187
	0,50	4105	5023
	0,60	3950	4833
	0,80	3603	4409
	1,00	3238	3962
GUIDE RAIL THICKNESS (mm)		9 - 15	16

## 2. ASSEMBLY.

The instantaneous action Safety-gear is supplied ready to be adapted to the chassis, as there is no adjustment element.

The Safety-gear is anchored to the chassis with 4 M12 screws, minimum quality 8.8, with 12mKg grip torque. It is adjusted with the rubbing plates until the guides are parallel to that of the flat side of the box and the d.b.g. (distance between guide) to the bottom of the box.

The operation of the rollers must be simultaneous and when the chassis is released from the lock position, the rollers must return to their stand-by position.

## 3. TEST.

This safety gear has been designed according to requirements of the EN-81 standard. To verify the operation of the safety gear it is compulsory to carry out the operation tests in downward direction.

## 4. MAINTENANCE OF THE SAFETY GEAR.

The following aspects must be guaranteed by manual and visual verification:

- The absence of dirt or foreign bodies in the roller path.
- That the rollers are in standby position.
- That the linkage moves easily by hand.
- Make sure that the fasteners are tight.
- That the electrical operation contact works.
- That the fastening of the govern rope to the linkage is accurate.

The tests performed during periodic maintenance, are not considered wedging.

If in the periodic maintenance the braking distance, for the same load conditions and speed, is less than double than the first start up wedging test, it will not be necessary to change any element of the safety gear.

The rollers are the elements that most suffer in an emergency wedging, so it is advised to check them after each wedging (not maintenance wedging), and clean, if necessary, the particles embedded in these elements.

## 5. REPAIR.

If a fault or a possible incorrect operation is detected, do not manipulate or repair the safety gear and replace with a new one.

## 6. EVALUATION OF RISKS AND SAFETY.

During the installation and handling of the safety gears during maintenance there is a risk of entrapment between the roller and the guide rail, so assure that the car is completely stopped.

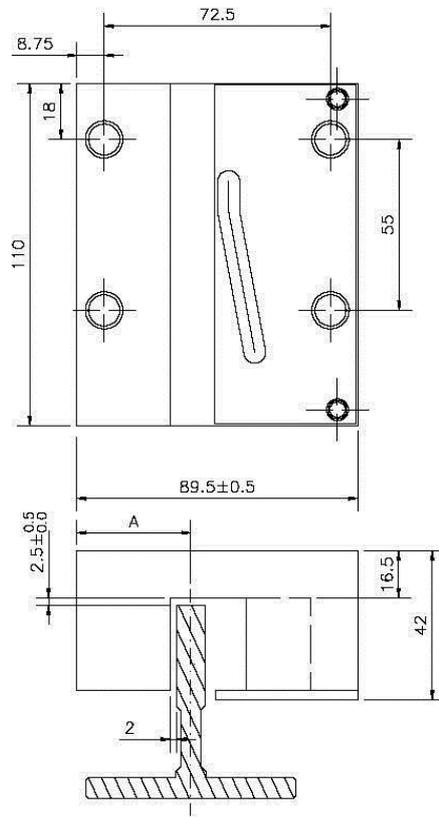
Safety gears are elements of heavy weight, so appropriate measures must be taken to avoid the falling of these on the installer or third parties, on the same level or different levels, and their correct manipulation to avoid excessive strain.

The installation of this component, requires adequate working tools for their correct installation. Their correct handling minimizes risks to the body.

During the installation of the safety gears the driving set or leverage is also installed, which is a mechanical element, whose elements can cause entrapment.

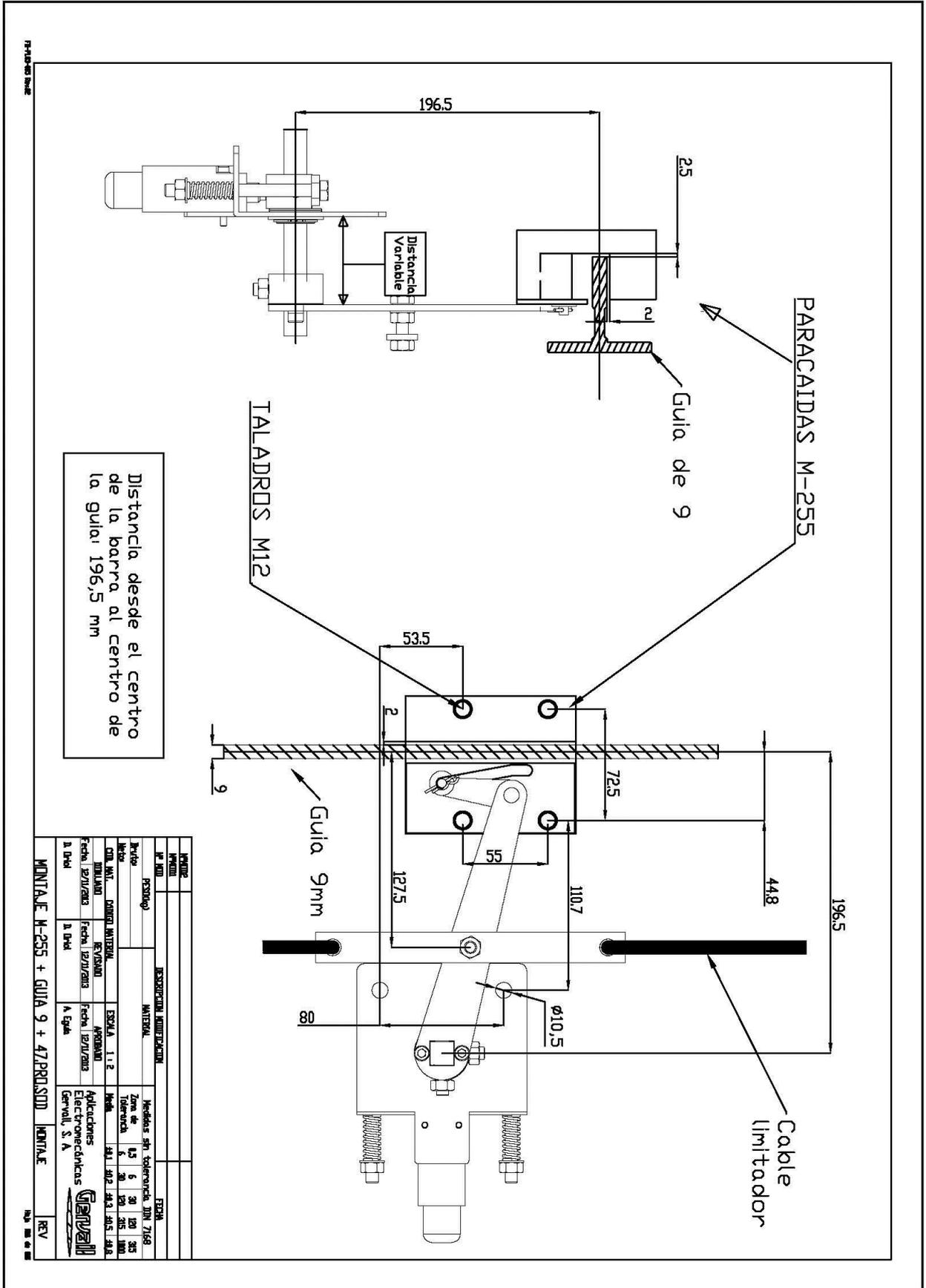
## 7. DRAWINGS.

**GUIDES: 8 - 15 mm.**



TIPO DE GUIA	"A"
G-8	35.5
G-9	36
G-10	35.5
G-11	35
G-12	34.5
G-13	34
G-14	33.5
G-15	33

REVISIÓN	FECHA	NOMBRE	DESCRIPCIÓN
DIBUJADO	09/04/08	M.M.	
COMPROB.			
ESCALA	PROYECTO CONJUNTO INSTANTANEO M-255	1 IZQUIERDO 1 DERECHO	<b>Gervall</b>
EMPRESA	DENOMINACION MONTAJE GENERAL	N° PLANO 255-1001A	



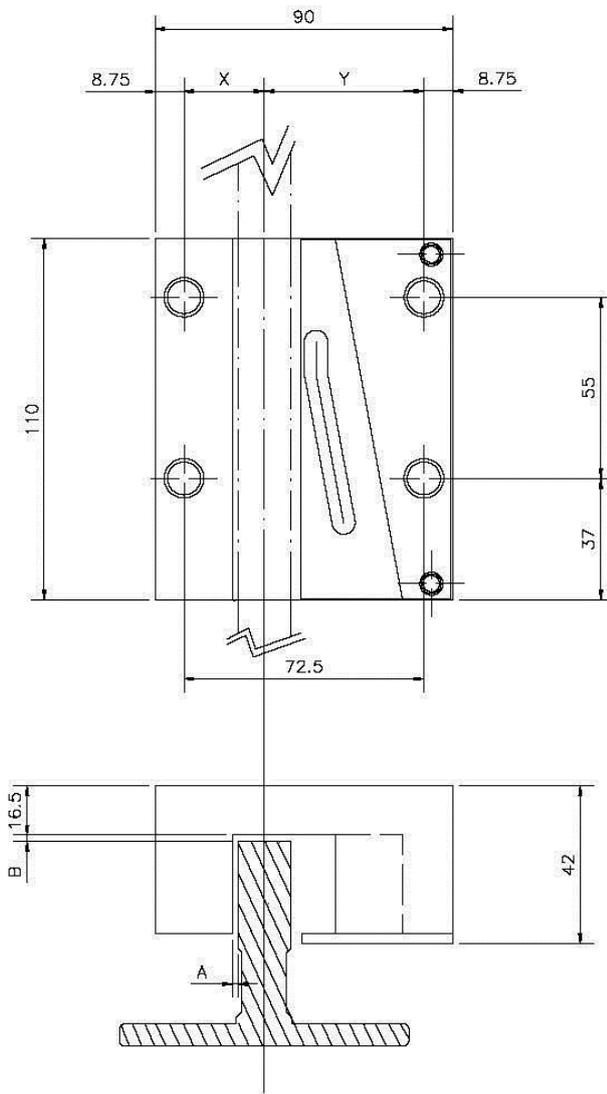
REVISIÓN		DESCRIPCIÓN MODIFICACION		FECHA	
REV.	FECHA	REV.	FECHA	REV.	FECHA
1		1		1	

MONTAJE M-255 + GUIA 9 + 47PRD.SDD		MONTAJE	
REV.	FECHA	REV.	FECHA
1		1	

MATERIAL		MATERIA		ESCALA	
DESCRIPCIÓN	CANTIDAD	DESCRIPCIÓN	CANTIDAD	ESCALA	FECHA
PARACAIDAS M-255	1	PARACAIDAS M-255	1	1:1	10/10/2010
TALADROS M12	2	TALADROS M12	2	1:1	10/10/2010
Guia 9mm	1	Guia 9mm	1	1:1	10/10/2010
Cable limitador	1	Cable limitador	1	1:1	10/10/2010

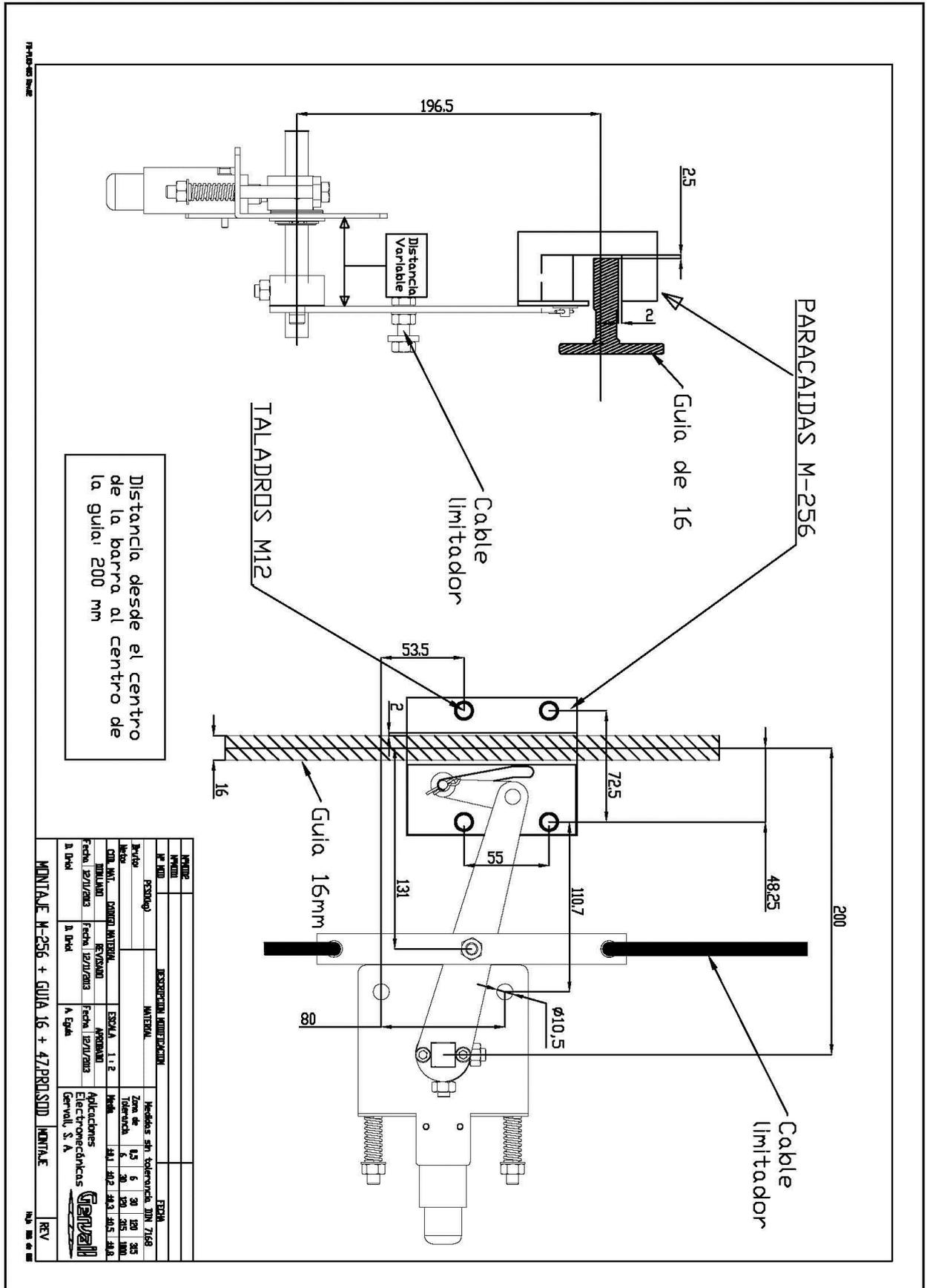
MONTAJE M-255 + GUIA 9 + 47PRD.SDD		MONTAJE	
REV.	FECHA	REV.	FECHA
1		1	

## GUIDE 16 mm.



TIPO DE GUIA (mm)	A	B	X	Y
16	1.5	2.5 <sup>+0.5</sup> <sub>-0.0</sub>	24.25	48.25

REVISIÓN	FECHA	NOMBRE	DESCRIPCIÓN	
	16/06/04	M.M	MATERIAL	ACABADO
DIBUJADO				
COMPROB.				
ESCALA	PROYECTO PARACAIDAS INSTANTANEO M-256			
EMPRESA	DENOMINACION MONTAJE GENERAL			
			Nº PLANO 256-1001	





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