

INSTRUCTIONS: IN-6000

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# INSTANTANEOUS SAFETY GEAR IN-6000

## INSTRUCTIONS FOR USE AND MAINTENANCE

**1- INTRODUCTION AND COMPATIBILITY IN FIXING.**

**2.-POSSIBLE ASSEMBLIES. IN-4000 REPLACEMENT**

**3- INSTUCTIONS FOR USE AND MAINTENANCE.**

**4- GENERAL DRAWING.**

**5- EEC TYPE-EXAMINATION CERTIFICATES.**

## **1.- INTRODUCTION**

### **FIXING COMPATIBILITY**

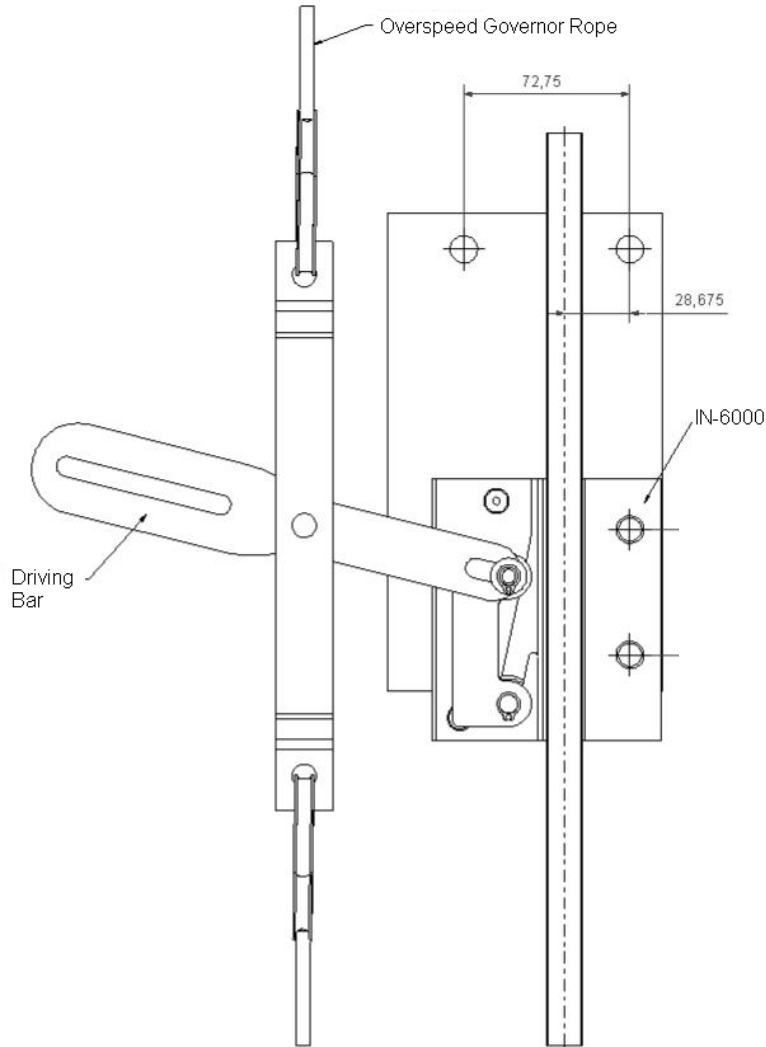
The design of the Dynatech Instantaneous Safety Gears has been carried out in order to make compatible their fixing to the sling with the **fixing of the progressives** PR-2500, PR-2500-UD and PR-2000-UD.

In addition this safety gear is perfectly **compatible in fixings with the old instantaneous safety gears** IN-2000 and IN-4000, due to both, the holes and the safety gear position with regard to the guide are the same in both types.

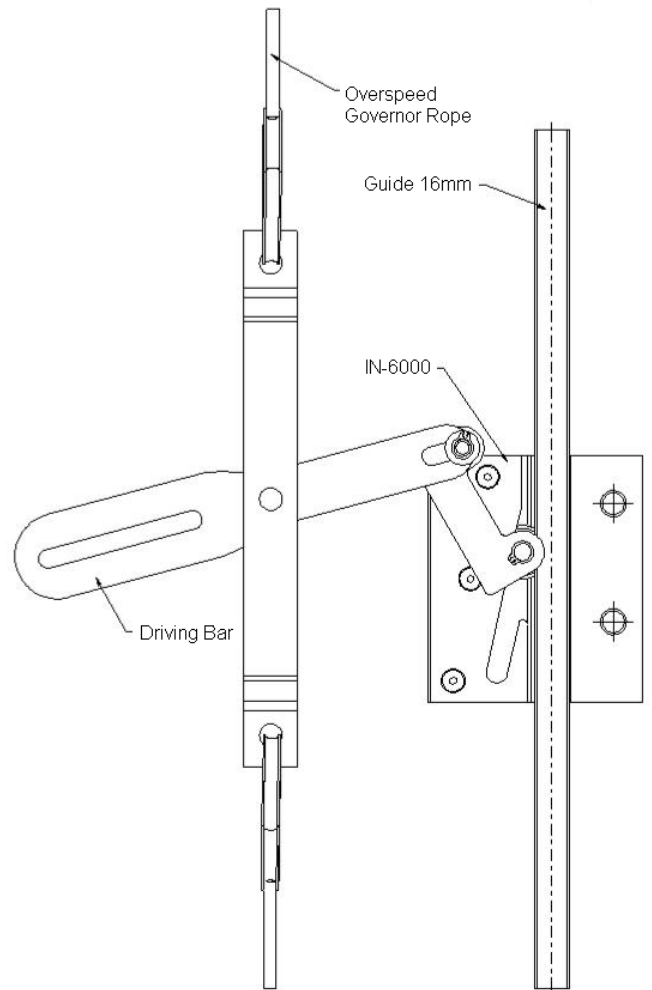
In the following pages several ways of acting are proposed with the Instantaneous Safety Gears, taking into account the compatibility mentioned above. Different positions can be achieved depending on the situation of the acting bars in the sling. The final solution about the location and linkage for the IN-2000, IN-4000, PR-2500 and acting bars is to be chosen by the sling maker according to his preferences.

The main advantage of this concept for a sling maker is an important cost saving. There is no need to stock different kinds of sling pieces to fix diverse safety gears.

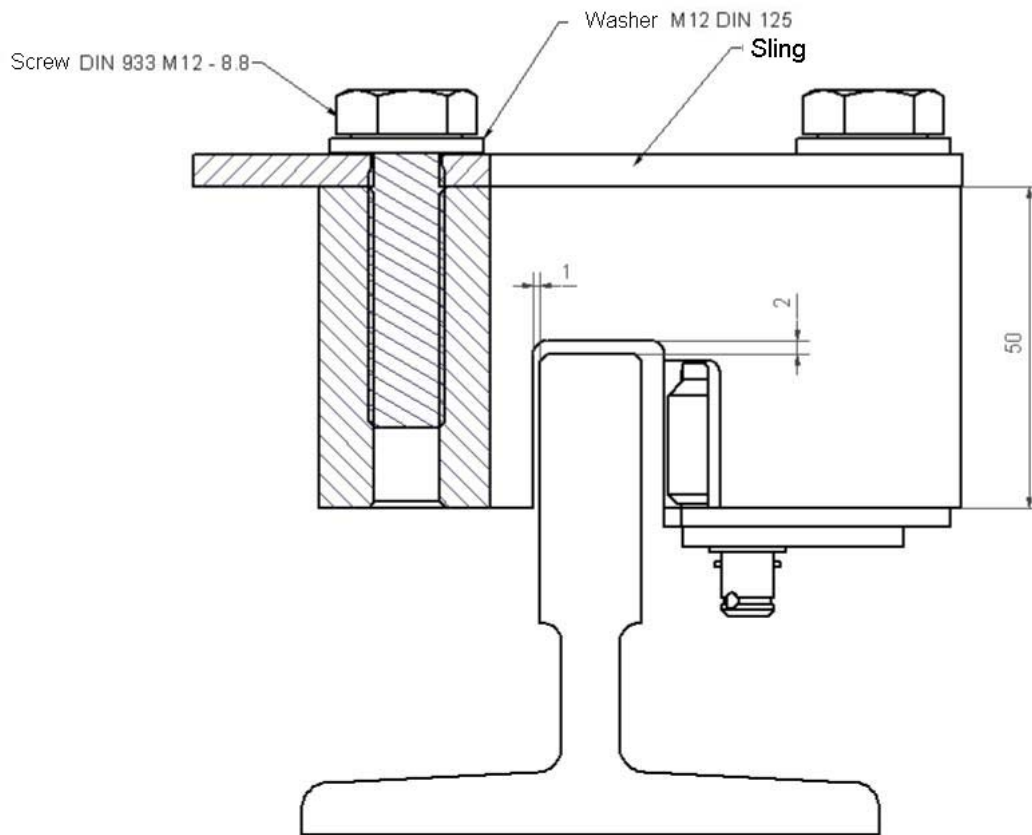
### ASSEMBLY OF INSTANTANEOUS SAFETY GEARS IN ACCORDANCE WITH PROGRESSIVES



#### ACTING EXAMPLE

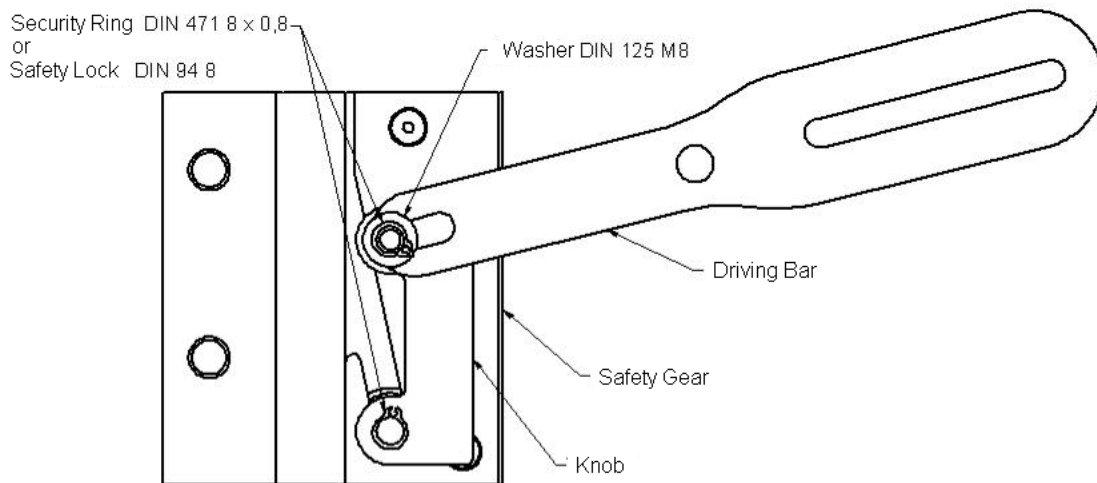


**INSTANTANEOUS SAFETY GEAR FIXING TO THE SLING**



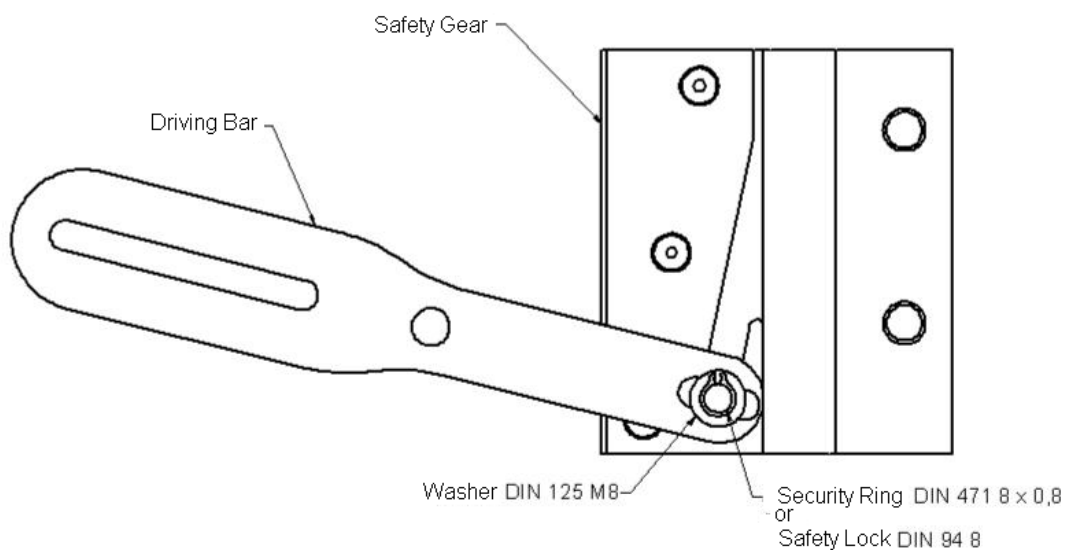
**2.-POSSIBLE ASSEMBLINGS. IN-4000 REPLACEMENT.**

The suitable assembling for the good working of IN-6000 should be with the knob of instantaneous safety gears: The driving bar acts the safety gear by the knob pivot. It is possible to use the driving bar T1 with this assembling. In the next figure it's shown how it has to be made the assembling.



As

an additional option, the customer using their own driving bar, it's offered the possibility to use the IN-6000 without knob. The driving bar acts directly to the roller. In this case the safety gear is provided without knob. It is not possible to use the driving bar T1 of Dynatech with this disposition, the sling maker will use his own driving bar.



In order to the IN-4000 is replaced perfectly by the IN-6000, The instantaneous knob has to be placed a bit inclined, as it's shown in the next figure.



### **3- INSTRUCTIONS FOR USE AND MAINTENANCE**

During the introduction, the different installation ways offered by Dynatech instantaneous safety gears, have been described. The final decision about the situation and location of them, only depends on the sling-maker criteria, however, the distances and technical informations mentioned must be followed in order to get a good safety gear functioning.

In the event that the driving bar was not the Dynatech one, the sling maker must also follow the instructions mentioned.

Referring to the scope of application, guide rail type and state, lubricant, dimensions, etc..., the information shown in the EEC type examination certificate of each safety gear must be strictly respected.

In order to avoid unnecessary risks, which could provoke a wrong safety gear engagement, cleaning and corrosion must be taken in care. The moving elements of the safety gear will be the speed reducers. The dirtiness between these elements and the surfaces where they slide could force a wrong acting or even prevent it. The installer first, and then the maintenance person must make sure that all these elements are in perfect state.

Dynatech safety gears have anticorrosive protection in all cases, however, a periodical checking must be done to make sure that the moving elements are in perfect work conditions. A visual checking of the surfaces condition and also of its free movements will be enough (it is not necessary to make a wedging test). These verification must be done more often when the installation is placed inside a specially corrosive atmosphere.

Finally, the safety gear state must be always checked after an engagement. There should never be any permanent deformation or crack at any of its components.





The elements affected by those deformations or by the corrosion must be replaced. In that case, please contact Dynatech or its nearest distributor, in order to know the procedure to be followed.

Dynatech will not be responsible of any damages caused by the inobservance of the prescriptions and advises mentioned in these instructions as well as in the CEE Type examination certificates.



## 5.- EEC TYPE-EXAMINATION CERTIFICATES

**ATISAE**  
ASISTENCIA TÉCNICA INDUSTRIAL S.A.E

### CERTIFICADO DE EXAMEN C.E. DE TIPO EC TYPE-EXAMINATION CERTIFICATE

**De un paracaídas de acción instantánea.**  
Instantaneous safety gear.

**Número de certificado. /Certificate number.** ATI / LD – VA / M140 / 05

**Organismo Notificado. / Notified Body.** **Asistencia Técnica Industrial S.A.E. (ATISAE)**  
Avda. de la Industria, 51 bis  
E 28760 Tres Cantos MADRID ( ESPAÑA )  
Nº de identificación 0053.

**Clase. Tipo.** **Paracaídas de acción instantánea. IN 6000**  
Product. Type. Instantaneous safety gear.

**Nombre y dirección del fabricante:** **DYNATECH DYNAMICS AND TECHNOLOGY S.L.**  
Manufacturer's name and address. **P.I. Pina de Ebro, sector C, parc 9**  
**50750. ZARAGOZA ( ESPAÑA )**

**Nombre y dirección del propietario del certificado:** **DYNATECH DYNAMICS AND TECHNOLOGY S.L.**  
Name and address of Certificate holder. **P.I. Pina de Ebro, sector C, parc 9**  
**50750. ZARAGOZA ( ESPAÑA )**

**Fecha de presentación:** **DICIEMBRE. 2004**  
Date of submission. December

**Fecha del examen de tipo:** **ENERO 2005**  
Date of EC type examination. January

**Laboratorio de ensayo:** **Lab. de ensayos de materiales de la E.T.S.I.I.M.**  
Test laboratory. **C/ José Gutiérrez Abascal, 2.**  
**28006 MADRID ( ESPAÑA ).**

**Fecha y nº de protocolo de ensayo:** **2004-016 DE JULIO. 2004 (16 mm estirada)**  
Number and date of laboratory report. **2003-037 DE NOVIEMBRE. 2004 (16 mm cepillada)**

**Directiva CE aplicada** **Directiva 95/16/CE de 29 de Junio de 1995.**  
EC- Directive. EC- Directive 95/16/EC of 29.06.1995.

**Norma de referencia:** **EN 81-1/2: Agosto / August 1998**  
Reference standard

**Declaración:** **El campo de aplicación de este componente de seguridad queda establecido en el anexo a este certificado**  
Statement. The scope of application of this safety component is stated in the annex to this certificate.



Emitido en Madrid, **11 DE ENERO DE 2005**

Juan A. Cano Hernández  
Director Técnico

**Este certificado consta de esta portada, un anexo técnico de 2 hojas y 1 plano**  
This certificate consists of this main page, a technical annex with 2 pages and 1 drawing

**ANEXO AL CERTIFICADO DE EXAMEN CE DE TIPO ATI/LD-VA/M140/05**  
 ANNEX TO THE CE TYPE EXAMINATION CERTIFICATE ( ABOVE )

**1. Campo de aplicación:**  
 Scope.

**1.1. Masa total admisible de cabina y su carga y/o contrapeso empleando dos dispositivos de paracaídas en relación con la velocidad de disparo del limitador de velocidad y características de las guías:**

Permissible mass of the car and its load and/or counterweight or balancing weight using two safety gear devices versus the overspeed governor tripping speed and guide rails features.

Vd (m/s)	Masa total admisible (P+Q)(Kg) / Permissible mass (kg).	
	T90/A	T90 /B
0.5	8370	6715
0.6	8054	6461
0.7	7709	6184
0.8	7346	5893
0.9	6974	5595
1.0	6601	5295
1.1	6232	4999
1.2	5873	4711
1.32	5459	4379
1.65	4444	3565

**Vd = Velocidad de disparo del limitador (m/sg)**  
 Overspeed governor tripping speed (m/sg).

Estos valores de masa admisible son válidos para guías de similares características según indica el tercer párrafo de la cláusula F.3.2.1 de la norma EN 81 -1 / -2

This values of permissible mass are acceptable for guide rails of similar characteristics according the third sentence of F.3.2.1 ( EN 81 -1 / -2 standard )

**1.2. Velocidad nominal máxima:**  
 Maximum rated speed.

<b>Cabina / Car:</b>	<b>0,63</b> m/s
<b>Contrapeso / Counterweight:</b>	<b>1,00</b> m/s

**1.3. Velocidad máxima de disparo del limitador de velocidad:**  
 Maximum overspeed governor tripping speed.

<b>Cabina / Car:</b>	<b>1,00</b> m/s
<b>Contrapeso / Counterweight:</b>	<b>110% Vdc</b>

**Nota: Vdc = Velocidad de disparo del limitador de velocidad de cabina.**  
 Car overspeed governor tripping speed

**1.4. Tipo de guía:**  
 Type of the guide rail.

Designación:	T90 /A	T90 /B
Designation		
<b>Espesor de guía:</b>	<b>16</b>	<b>16</b>
Guide rail thickness		
<b>Ancho de guía:</b>	<b>42</b>	<b>42</b>
Width		

**Todos los valores en mm / Every distance in mm**


# ATISAE

ASISTENCIA TÉCNICA INDUSTRIAL, S.A.E.

## 2. Notas. Remarks.

### 2.1. Sobre el dispositivo del paracaídas debe colocarse una placa con los datos indicados a continuación:

It shall be placed an identifiable plate on the safety gear with the following items.

**Nombre del fabricante**  
Manufacturer's name

**Signo del examen de tipo y sus referencias**  
EC type-examination mark and its references

### 2.2. La certificación afecta a los elementos de frenado y no incluye a los elementos de conexión, palanquería, ni a la actuación del dispositivo eléctrico. Se debe considerar que la distancia entre los componentes del paracaídas cuando son actuados por el limitador de velocidad no superen los 0.03 m.

The certificate affects to the gripping elements and does not include, either the connection elements, safety gear rods, or the actuation of the electric safety device. It shall be considered that the distance between safety gear components when engaging the overspeed governor does not exceed 0.03 m.

### 2.3. Se adjunta a la presente certificación el siguiente documento:

The following document is enclosed to this certificate.

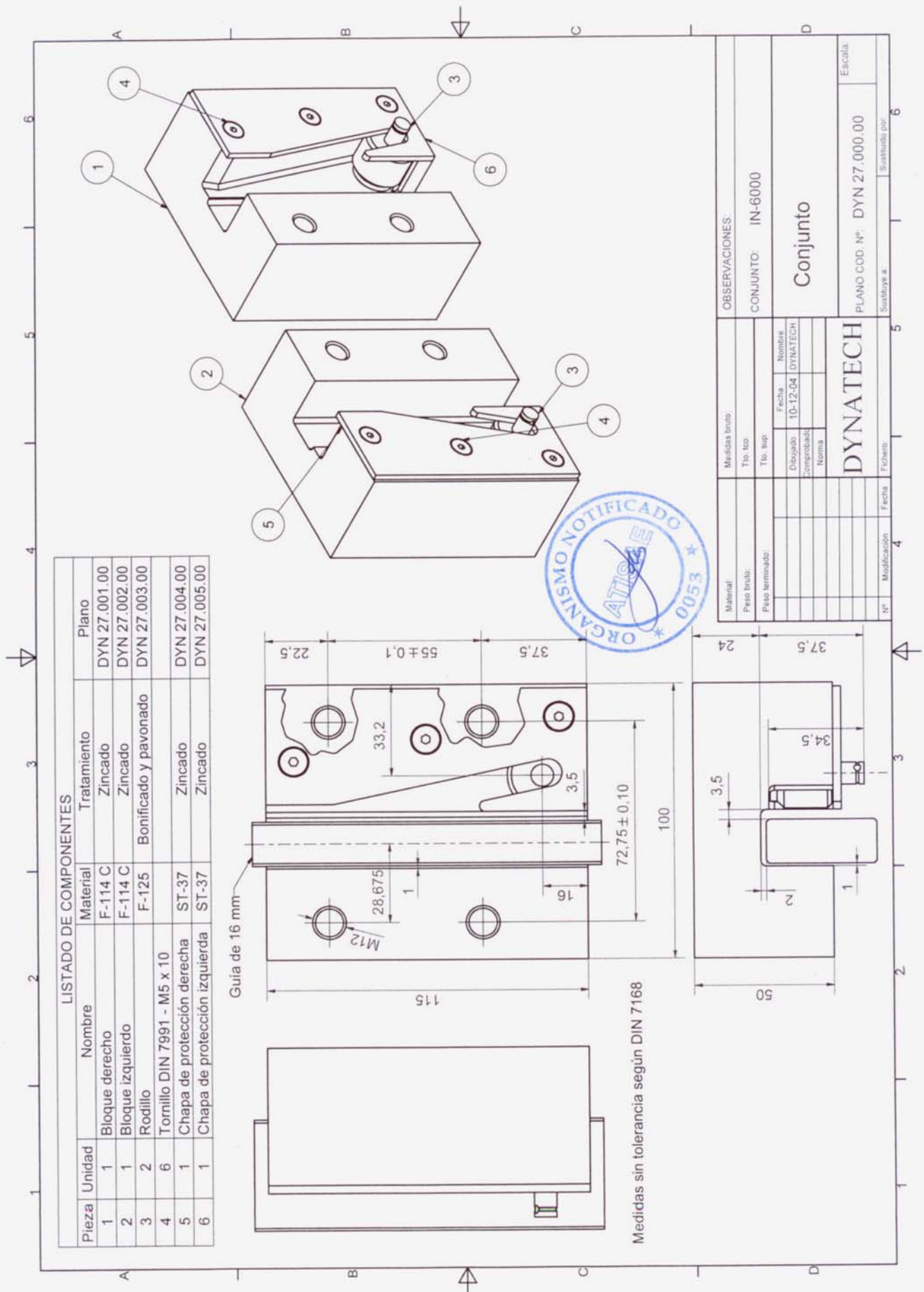
DESIGNACIÓN	FECHA	LEYENDA
Number	Date	Title
DYN 27.000.00	10/12/04	IN 6000 CONJUNTO

### Los planos se adjuntan con objeto de proporcionar identificación e información sobre el diseño básico del componente de seguridad.

Drawings are enclosed in order to provide identification and information about the basic design of the safety component.

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**LISTADO DE COMPONENTES**

Pieza	Unidad	Nombre	Material	Tratamiento	Plano
1	1	Bloque derecho	F-114 C	Zincado	DYN 27.001.00
2	1	Bloque izquierdo	F-114 C	Zincado	DYN 27.002.00
3	2	Rodillo	F-125	Bonificado y pavonado	DYN 27.003.00
4	6	Tornillo DIN 7991 - M5 x 10	ST-37	Zincado	DYN 27.004.00
5	1	Chapa de protección derecha	ST-37	Zincado	DYN 27.005.00
6	1	Chapa de protección izquierda	ST-37	Zincado	DYN 27.005.00

Material		Medidas inicio:		OBSERVACIONES:	
Peso inicio:		Tto. to:		CONJUNTO: IN-6000	
Peso terminado:		Tto. sup:		Conjunto	
		Dobrado:		PLANO COD. N°: DYN 27.000.00	
		Comprobado:		Escala	
		Fecha:		Sustituido por:	
		Nombre:		DYNATECH	
		Norma:			
N°		Fecha		Modificación	
4		4		5	
5		5		6	

Medidas sin tolerancia según DIN 7168