



LIMITADOR DE VELOCIDAD/
OVERSPEED GOVERNOR/
LIMITEUR DE VITESSE/
GESCHWINDIGKEITSBEGRENZER/

QUASAR-T25

INSTRUCCIONES DE USO Y MANUTENCIÓN/
INSTRUCTIONS FOR USE AND MAINTENANCE/
INSTRUCTIONS D'USAGE ET ENTRETIEN/
GEBRAUCHS- UND WARTUNGSANLEITUNG/

REVISION	08	DATE	15/06/2016	PRODUCED BY / APPROVED BY	P. Hernández/J. Marco
SECTION	DESCRIPTION				EFFECTIVE DATE OF CHANGE
2	OVERSPEED GOVERNOR IDENTIFICATION LABEL was added				Not applicable
REVISION	07	DATE	27/04/2016	PRODUCED BY / APPROVED BY	P. Hernandez / V. Navaz
SECTION	DESCRIPTION				EFFECTIVE DATE OF CHANGE
-	The certificate number according to the UNE-EN 81-20, UNE-EN 81-50 and 2014/33/EU Directive is included.				Not applicable
REVISION	06	DATE	03/03/2016	PRODUCED BY / APPROVED BY	P. Hernandez / V. Navaz
SECTION	DESCRIPTION				EFFECTIVE DATE OF CHANGE
4.1	Note: Q-T25+ASG Right-hand was added.				Not applicable
REVISION	05	DATE	17/12/2015	PRODUCED BY / APPROVED BY	P. Hernandez / V. Navaz
SECTION	DESCRIPTION				EFFECTIVE DATE OF CHANGE
2	This section was added.				Not applicable
REVISION	04	DATE	25/02/2015	PRODUCED BY / APPROVED BY	J. Marco / V. Navaz
SECTION	DESCRIPTION				EFFECTIVE DATE OF CHANGE
4.1.1	A threaded hole is added to the Quasar T-25 support piece to change the pulley guard position.				25/02/2015
9	Updated plans				25/02/2015
REVISION	03	DATE	02/04/2014	PRODUCED BY / APPROVED BY	Pilar H./Victor N.
SECTION	DESCRIPTION				EFFECTIVE DATE OF CHANGE
6	The ranges between the maximum and minimum tripping speeds for the unidirectional and bidirectional governors were changed.				Not applicable
8.1	This section was added.				Not applicable
REVISION	02	DATE	31/01/2014	PRODUCED BY / APPROVED BY	Victor N./Victor N.
SECTION	DESCRIPTION				EFFECTIVE DATE OF CHANGE
4.6	A D-Box note is included for creeps over 20 mm.				Not applicable
REVISION	01	DATE	04/10/2013	PRODUCED BY / APPROVED BY	Pilar H./Victor N.
SECTION	DESCRIPTION				EFFECTIVE DATE OF CHANGE
-	Item 3.6.2 has been deleted: Anti-creep system for UCM from the previous version.				Not applicable
4.6.2	This section has been renumbered and extended, item 3.6.3 in the previous version.				Not applicable
4.6.3	This section has been renumbered, 3.6.4 in the previous version.				Not applicable
4.6.4	It includes Parking system maintenance.				Not applicable
5	Unidirectional version is included.				Not applicable

CERTIFICADO DE EXAMEN U.E. DE TIPO EU TYPE-EXAMINATION CERTIFICATE

Según el anexo IV parte A de la Directiva 2014/33/UE / According annex IV part A of Directive 2014/33/EU

ATISAE, Organismo de Control Autorizado acreditado por ENAC con acreditación nº OC-I/025

Número de certificado. / Certificate number	ATI / LV / 007	rev: 0
Organismo Notificado. Notified Body	Asistencia Técnica Industrial S.A.E. (ATISAE) Avda. de los Artesanos, 20 E 28760 Tres Cantos MADRID (ESPAÑA) Nº de identificación / ID number 0053 .	
Clase. Tipo. Product. Type	Limitador de velocidad (LV) Overspeed governor	
Modelo / Model	QUASAR (embarcado / ONBOARD);	
Fabricante. Manufacturer	DYNATECH. DYNAMICS AND TECHNOLOGY S.L.U. P.I. PINA DE EBRO, SECTOR C PARCELA 9 50750 ZARAGOZA.	
Propietario del certificado. Certificate Holder	DYNATECH. DYNAMICS AND TECHNOLOGY S.L.U. P.I. PINA DE EBRO, SECTOR C PARCELA 9 50750 ZARAGOZA.	
Fecha de presentación. Date of submission	20/01/2016	
Fecha del examen de tipo. Date of type examination.	20/04/2016	
Laboratorio de ensayo. Test laboratory	(véase en el anexo técnico sección 2.17). (Please refer to technical annex section 2.17)	
Informe de ensayo Test report	(véase en el anexo técnico sección 2.17). (Please refer to technical annex section 2.17)	
Directiva / Directive.	Directiva 2014/33/UE de 26 de febrero de 2014 Directive 2014/33/EU of 26 February 2014	
Norma de referencia. Standard of reference	EN 81-1:1998+A3:2009; EN 81-2:1998+A3:2009 EN 81-20:2014; EN 81-50:2014;	
Informe de ATISAE. / ATISAE report	MD_DEU_161258.001 (20.04.2016) MD_DEU_130516 (01.02.2013) MD_DEU_120011 (02.04.2012)	
Plazo de validez / Expiry date	Indefinido / (véase en el anexo técnico sección 2.19). Indefinite / (Please refer to technical annex section 2.19)	

Declaración: El componente de seguridad permite al ascensor sobre el que se instale satisfacer los Requisitos de Seguridad y Salud de la citada Directiva usándose dentro del alcance que queda establecido en el anexo técnico de este certificado, así como con las condiciones de instalación indicadas.

Statement: The safety component allows the lift on which it is installed to satisfy the health and safety requirements of the Lifts Directive when it is used within the scope, as well as under the installation conditions that are set up in the technical annex to this certificate.




José Manuel Flórez González
Director Técnico Elevación

Este certificado consta de esta portada, un anexo técnico de 4 hojas y 2 planos / documentos. Su reproducción carece de validez si no se realiza totalmente.

This certificate consists of this main page, a technical annex with 4 pages and 2 drawings / documents. It shall be reproduced with all its pages to be considered valid.

ANEXO TECNICO AL CERTIFICADO DE EXAMEN UE DE TIPO ATI / LV / 007 rev 0
 TECHNICAL ANNEX TO THE EU TYPE EXAMINATION CERTIFICATE ATI / LV / 007 rev 0

1. **Campo de aplicación:**
 Scope.

1.0. **Descripción:**
 Brief description.

El limitador de velocidad modelo QUASAR EMBARCADO, es un limitador compacto de 125 mm de diámetro exterior que utiliza un cable de 4 mm de diámetro y calidad de valor superior a 1770 N/mm² en contra de EN 12385-5 (desviación de [5.6.2.2.1.3.a])). La polea del limitador junto con una polea de desvío, se sitúan fijadas al bastidor de cabina, de manera que viaja con esta a lo largo de todo el recorrido. Se emplea un cable tensado en configuración “abierta” con tensores por muelle en cada extremo del cable, situados más allá de los extremos de recorrido (desviación de [5.6.2.2.1.3.d])).

El limitador se presenta en dos configuraciones:

- modelo “Quasar T-25”, que se sirve con una timonería, sistema de accionamiento de los paracaídas y paracaídas integrado todo en un conjunto, y
- modelo “Quasar SV”, para el que el instalador proporcionara dichos componentes. En este caso El instalador comprobará la compatibilidad del conjunto desarrollado con el par disponible que proporciona el limitador (véase nota 2.9).

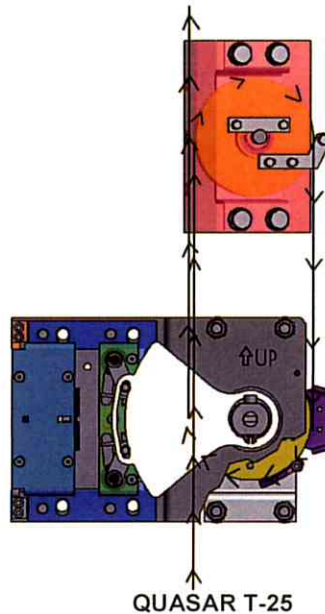
Las poleas de limitador y de desvío pueden situarse en la posición relativa superior o inferior de un lado de la cabina indistintamente e inspeccionables desde el techo de cabina o desde el foso.

The overspeed governor type QUASAR ONBOARD, is a compact governor with 125 mm of external diameter that uses a 4 mm diameter rope and wire breaking grade above 1770 N/mm² against EN 12385-5 (deviates from [5.6.2.2.1.3.a])). The governor sheaves and its diverter pulley are assembled to the car frame, so it travels with it along the hoistway. It is used a wire rope with an initial tensioning force in “open circuit” layout with double spring tensioning device at rope ends, located beyond the travelling run ends (deviates from [5.6.2.2.1.3.d])).

The governor has two possible arrangements:

- “Quasar T-25”, delivered with levers, tripping gear and safety gear, everything assembled as a single pack, and
- “Quasar SV”, for which these components shall be provided by the installer. For this case, the installer shall check the compatibility of the whole assembly with the available torque that the governor can provide (please refer to remark 2.9)

The governor and its diverter pulley may be located either in the top or bottom of the side of the car and will be able to be inspected from the car roof or from the pit.



1.1. **Velocidad de disparo ⁽¹⁾:** 0.30 ÷ 2.63 m/s
 Permissible tripping speed.

(1) Existen tres configuraciones para distintos rangos de velocidad.
 There are three arrangements for diverse speed range.

1.2. **Velocidad nominal:** ≤2.18 m/s
 Permissible rated speed.

1.3. **Diámetro primitivo de la polea del limitador:** 120 mm
 Pitch diameter of the governor pulley



1.4. Cable:

Driving rope:

1.4.1. Diámetro:
Diameter.

4.0 mm

1.4.2. Composición:
Art.

DRAKO STX

1.4.3. Características:
Features

construcción / art	Ro	MBL	ρ
-	[N/mm ²]	[N]	[kg/m]
6x17 Seale + WSC sZ U	1960	≥ 12.6 kN	0.069

1.5. Mínima fuerza tensora (ver nota 2.12):

Minimum tensioning force (please refer to remark 2.12)

Fuerza de tensión mínima debida al tensor ⁽²⁾:
Minimum tensioning force due the tensioning springs

491 N

(2) La fuerza de tensión inicial del cable no debe superar 745 N.
Initial tensioning force in the rope shall not be higher than 745 N.

1.6. Fuerza transmitida a los medios de frenado con mínima fuerza tensora:

Tensile force transmitted to the braking gear at minimum tensioning force

(Ta) Par disponible ⁽³⁾:
(Ta) Available torque

30 N·m

(3) Este es el par capaz de proporcionar el limitador con la mínima fuerza tensora. Para la ejecución "Quasar SV" es preciso comparar este valor con el par necesario según se indica en la nota 2.9.
This is the torque the governor is able to provide with the minimum tensioning force. For "Quasar SV arrangement" it is necessary to compare this torque with the necessary torque according to what is shown on remark 2.9.

2. Notas.

Remarks.

2.1. Utilización del dispositivo. El limitador de velocidad puede utilizarse como medio de detección de la sobrevelocidad en bajada [5.6.2.2.1], así como medio de detección de la sobrevelocidad en subida [5.6.6.10.a)]. El limitador puede ser utilizado como actuador del elemento de parada en un sistema de protección contra movimiento no intencionado de cabina [5.6.7] [con este objeto el limitador puede utilizar el llamado 'sistema parking', según certificado AT/CA001].

Intended use of the device. The overspeed governor can be used as means of detection for overspeed downwards [5.6.2.2.1], as well as means of detection for overspeed upwards [5.6.6.10.a)]. The governor may be used as UCM tripping device for a stopping element in a protection system against unintended car movement [5.6.7] [for this purpose the governor may use the so called 'parking system device' as per certificate AT/CA001].

2.2. Sub tipos: Existen dos subtipos principales: Quasar T-25 que incluye un sistema de transmisión de par a la timonería y Quasar SV que solo consiste en el sistema de limitador. El sistema Quasar SV se sirve en un conjunto único mientras que el T-25 tiene su polea de desvío en un conjunto separado. Además existen tres sub-modelos dados por rango de velocidades de disparo, con elementos constructivos diferentes: standard (0.96 – 2.63 m/s) Quasar BV (0.65 – 1.02 m/s) y Quasar LS (0.29 – 0.66 m/s), este último de actuación solo en bajada.

Sub-types: There are two main sub-types: Quasar T-25 including a torque transmission system to the safety gears lever and Quasar SV that consists of only of governor system. Quasar SV is built in a single assembly while T-25 has its idler pulley in a separate assembly. Furthermore there are three sub-models depending on the tripping speed range available, with different construction elements: standard (0.96 – 2.63 m/s); Quasar BV (0.65 – 1.02 m/s) and Quasar LS (0.29 - 0.66 m/s), the latest for only down operation.

2.3. Los tipos de paracaídas utilizados conjuntamente con el limitador deben ser aquellos compatibles con la velocidad de disparo regulada en el limitador. Los límites de actuación son los marcados por [5.6.2.2.1.1].

The types of safety gears used in connection with the governor shall be those compatible with the tripping speed of the governor. The speed limits are those given per [5.6.2.2.1.1].

2.4. La distancia correspondiente al requisito de tiempo de respuesta [5.6.2.2.1.2] es inferior a 250 mm.

The distance related to the requirement for response time [5.6.2.2.1.2] is less than 250 mm

2.5. El cable del limitador es de construcción y uso especial asociado al certificado G461/2 emitido por TÜV SÜD Industrie Service. Dicho certificado está sometido a revisiones, siendo su plazo de validez 2018.09.11. Para dar validez a su utilización con este limitador el proveedor del limitador adjuntará con su documentación el certificado actualizado para este tipo de cable. Una razón de diámetros de 30 es aceptada por las condiciones de trabajo del cable a pesar de lo indicado en el citado certificado.

The governor's rope is of special use which is linked to the certificate G461/2 issued by TÜV SÜD Industrie Service. Such certificate is conditioned to revisions, being its validity date 2018.09.11. In order to provide validity for its use in connection with this governor, the governor's provider shall attach to the documents delivered with the governor the updated certificate for this kind of rope. A diameters ratio of 30 is accepted because of the working conditions of the rope despite what is stated in the mentioned certificate.

- 2.6. El factor de seguridad (FoS) debe ser calculado siguiendo las condiciones de [5.6.2.2.1.3.b)], adaptadas al diseño de accionamiento del limitador, teniendo en cuenta que depende de la fuerza de pretensado y de la masa de cables sobre el sistema tensor.
The Factor of Safety (FoS) [5.6.2.2.1.3.b)] shall be calculated following the conditions stated in clause [5.6.2.2.1.3.b)], adapted to the design of operation of the governor, taking into account that it depends on the tensioning force on the rope and the effect of the rope's mass on the tensioning system.
- 2.7. El limitador dispondrá de un dispositivo de disparo auxiliar con mando a distancia con el objeto de poder llevar a cabo la prueba del paracaídas.
The governor must have an auxiliary tripping device with remote control in order to carry out the safety gear test.
- 2.8. Debido a las condiciones de utilización especial de este cable, la vida útil del cable se ve reducida y debe someterse a la inspección de su estado periódicamente, descartándose según el criterio:
- 12 hilos rotos en 30 x d
- 6 hilos rotos en 6 x d
- con una reducción de diámetro mayor del 6% relativa al diámetro nominal
Because of the special use conditions for these ropes, they shall be subjected to periodical inspections of its integrity, being discarded according the criteria:
- 12 broken wires within a length of 30 x d
- 6 broken wires within a length of 6 x d
- with a diameter reduction of more than 6% related to the nominal diameter
- 2.9. El control eléctrico [5.6.2.2.1.6] es llevado a cabo por un contacto eléctrico de seguridad de rearme automático. El aflojamiento del cable también es controlado por contactos de seguridad. Se debe comprobar la compatibilidad de los valores asignados de tensión e intensidad bajo categorías AC15/DC13 según EN 60947-5-1 con relación a los valores nominales de la cadena de seguridad.
The electric monitoring [5.6.2.2.1.6] is carried out by an electric safety switch which is reset automatically. There are also safety contacts in order to check the breakage or loosening of the rope. It must be checked the compatibility of the rated voltage and current of the switches for categories AC15/DC13 according to EN 60947-5-1 related to the rated voltage and current of the safety chain.
- 2.10. El limitador ha sido sometido a la prueba de simulación de caída libre indicada por EN 81-50 [5.4.2.2.2] último párrafo, a la velocidad máxima de disparo con resultado favorable.
The governor has been favorably tested on the free fall simulation tripping; provision given by EN 81-50 [5.4.2.2.2] last paragraph, at maximum tripping speed.
- 2.11. El método de transmisión de la fuerza al dispositivo de frenado fijado a la polea del limitador Quasar SV, no es evaluado en esta certificación. La resistencia adecuada de los elementos de interconexión limitador-paracaídas, deben ser asegurados por el instalador para los requerimientos del dispositivo de frenado y los mencionados elementos de conexión entre ambos. El instalador deberá asegurar, midiendo la fuerza o par necesario para la activación de un conjunto particular de paracaídas con su timonería y medio de interconexión al limitador, que el par disponible (Ta) del limitador es capaz de proporcionar al menos un valor doble al requerido según [5.6.2.2.1.1.d)] y de detener la cabina de forma efectiva con los medios proporcionados.
The means transmitting the force to the car braking devices linked to the governor's pulley of Quasar SV are not assessed in this certificate. The installer must ensure an adequate strength of the connection elements between the governor and the safety gear, according to the mechanical requirements of such elements: safety gear and connection elements. The installer shall also ensure, by measuring the required force or torque needed to trip a particular safety gear assembly with its lever and connection to the governor, that the available torque (Ta) of the governor is able to provide at least two times the required according to [5.6.2.2.1.1.d)] and that the stopping of the car is effective with the means provided.
- 2.12. La fijación inferior del cable estará protegida contra golpes involuntarios. El instalador deberá asegurar en la fijación en el foso, la correcta protección contra la corrosión de las partes metálicas de los elementos presentes del sistema de fijación, en previsión de un fallo de impermeabilización del foso y comprobar su estado periódicamente. Los puntos fijos deben situarse de manera que el ángulo de entrada del cable a la polea no sea superior a 3°.
The lower attachment of the rope shall be protected against unintentional hitting. The installer must ensure in the pit rope's termination, suitable corroding protection of metallic elements in this terminal because of a foreseeable water leak in the pit and check it periodically. The rope attachments to the hoistway shall be placed in a way such the fleet angle shall not be higher than 3°.
- 2.13. Deben respetarse los límites de pre-tensado indicados en la sección 1.5. El sistema tensor debe comprobarse para alcanzar el valor mínimo de tensión según las indicaciones del fabricante y comprobarlo periódicamente.
The installer shall respect the initial tensioning limits shown in section 1.5. The tensioning system shall be tested in order to check that the minimum tensioning value is reached according the manufacturer's instructions and check it periodically.
- 2.14. Cuando se utilice la opción de accionamiento solo en bajada no puede usarse como sensor de velocidad para la actuación de dispositivos de protección contra sobrevelocidad en subida. Esto es debido a que la actuación sobre el contacto eléctrico se efectúa cuando la pieza denominada "estrella" es movida por los centrifugos. Existe un ángulo adicional de giro que permite dar cumplimiento a [5.6.2.2.1.6]. Cuando se utilice esta opción el paracaídas también será de actuación solo en bajada.
The option for ONLY DOWN tripping cannot be used as speed monitoring device for ascending car overspeed protection means. This is because the switch opening is effective when the component called "star" is displaced by the component called "centrifugal". There is an additional rotation angle that allows complying with [5.6.2.2.1.6]. When using this option the safety gears shall be also for ONLY DOWN operation.

2.15. Cuando el limitador de velocidad tenga partes accesibles al personal de mantenimiento sobre techo de cabina, se proveerán las protecciones adecuadas contra daños corporales. Dichas protecciones no forman parte de esta certificación.

When the governor has some of its elements accessible to maintenance personnel located on the car roof, adequate protections against bodily injuries shall be provided. Such protections are not part of this certification.

2.16. Sobre el dispositivo del limitador de velocidad debe colocarse una placa con los datos indicados a continuación:

It shall be placed an identifiable plate on the overspeed governor with the following items.

Nombre del fabricante	Signo del examen de tipo y sus referencias
Manufacturer's name	Type-examination mark and its references
Velocidad de disparo mecánico para la cual ha sido ajustado	
The actual tripping speed for which it has been adjusted	

También se indicará si el limitador es de actuación unidireccional o bidireccional.

It shall also be shown whether the governor is for UP and DOWN operation or ONLY DOWN operation.

La placa debe ser fácilmente visible desde el techo de cabina o desde el foso.

The plate shall be easily visible either from the car roof or from the pit.

2.17. Laboratorio de ensayo.

Test laboratory

Informe de ensayo

Test report

Asistencia Técnica Industrial S.A.E. (ATISAE)
Avda de los Artesanos, 20
28760. Tres Cantos MADRID (ESPAÑA)

MD_ELV_120011 (02.04.2012)

Lab. de ensayo de componentes de ascensores (LECA)
Escuela Técnica Superior de Ingenieros Industriales
Universidad Politécnica de Madrid
C/ José Gutiérrez Abascal, 2.
28006 MADRID (ESPAÑA)

2015-032	(10.02.2016)
2011-018	(14.07.2011)
2011-019	(02.09.2011)
2011-023	(15.12.2011)

2.18. Se adjunta a la presente certificación los siguientes documentos:

The following documents are enclosed to this certificate.

NÚMERO	FECHA	TÍTULO
Number	Date	Title
DYN 64.C001.00	08.03.16	QUASAR – SV
DYN 61.C001.02	08.03.16	QUASAR – T25

Estos documentos se adjuntan con objeto de proporcionar identificación e información sobre el diseño básico del componente de seguridad.

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

2.19. Este certificado no tiene fecha límite de validez salvo que se produzcan: cambios de diseño, cambios en la legislación o cambios técnicos en las normas de referencia. El fabricante deberá poner en conocimiento de este Organismo Notificado cualquier cambio de diseño previsto. La extensión de la validez también depende de la validez del certificado del cable (véase nota 2.5)

This certificate has not an expiry date except in case of: design modifications, changes in the applicable legislation or technical changes in the standards of reference. The manufacturer must communicate to this Notified Body any envisaged change of design. The validity extension also depends on the validity of the rope certificate (see remark 2.5)

2.20. Este certificado es la adaptación y revisión del certificado ATI/LD-VA/M207/12 emitido por ATISAE con fecha 02.04.2012 a la referencia de las normas EN 81-20 y EN 81-50 para el tipo Quasar embarcado.

This certificate is the adaptation and review of the certificate with number ATI/LD-VA/M207/12 issued on 02.04.2012 by ATISAE, to the standards with references EN 81-20 and EN 81-50 for the governor type Quasar on board

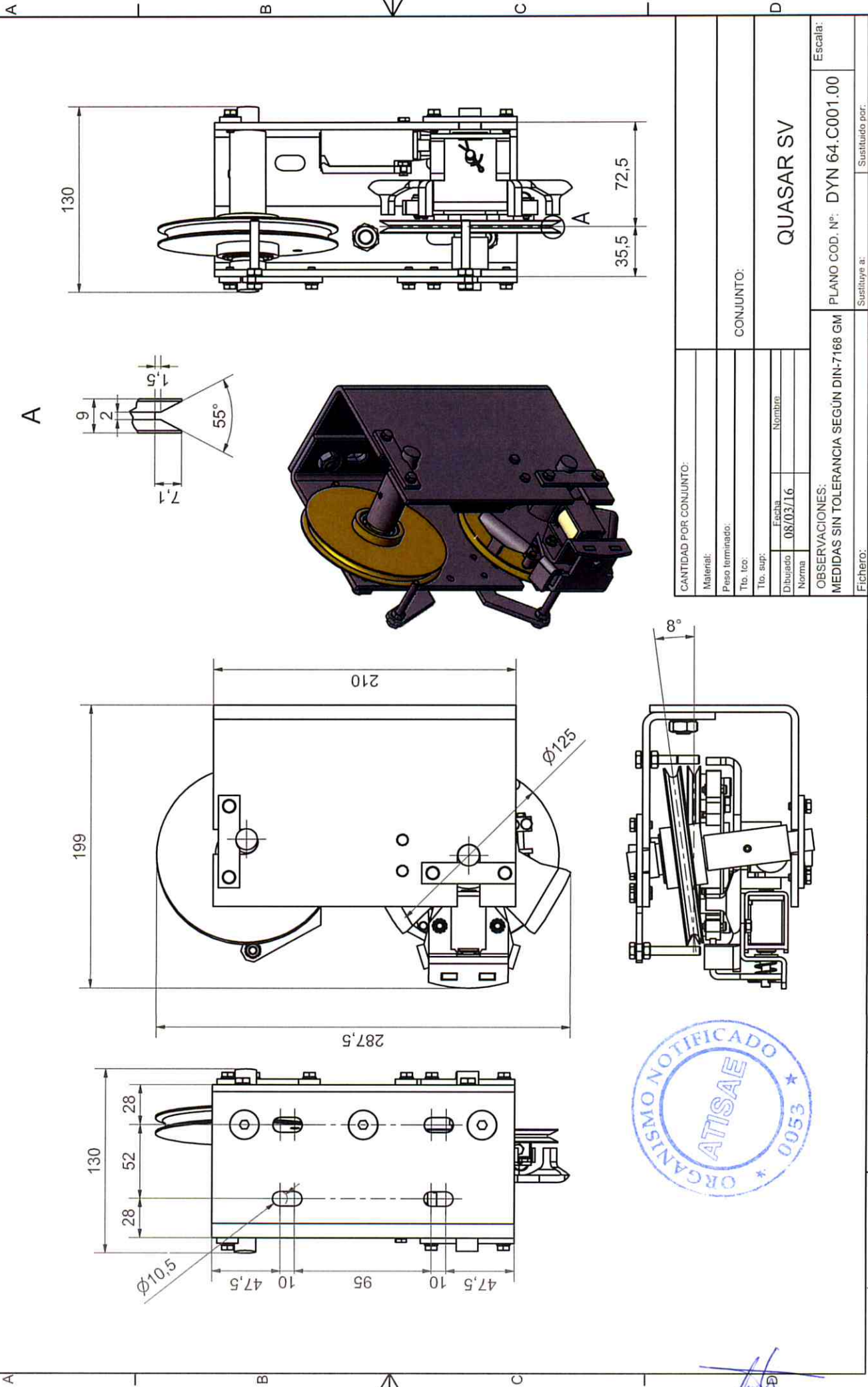
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Nota general. Todos los artículos mencionados con referencia a EN 81-20, salvo que se indique lo contrario.

General remark. All clauses mentioned with reference to EN 81-20, unless otherwise indicated.

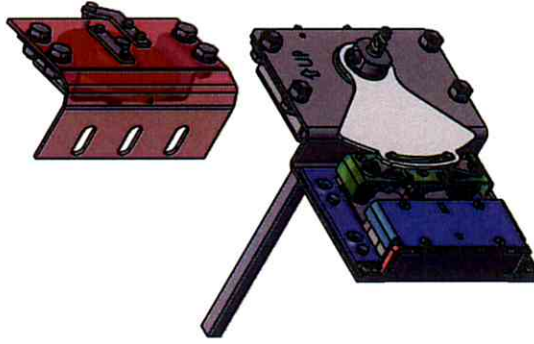
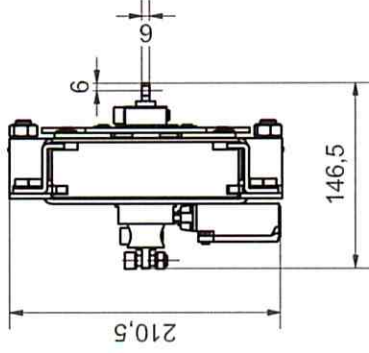
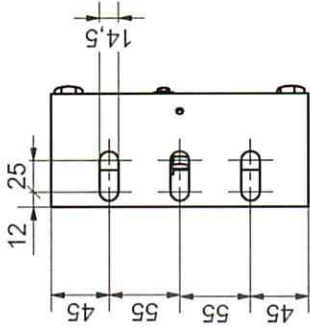
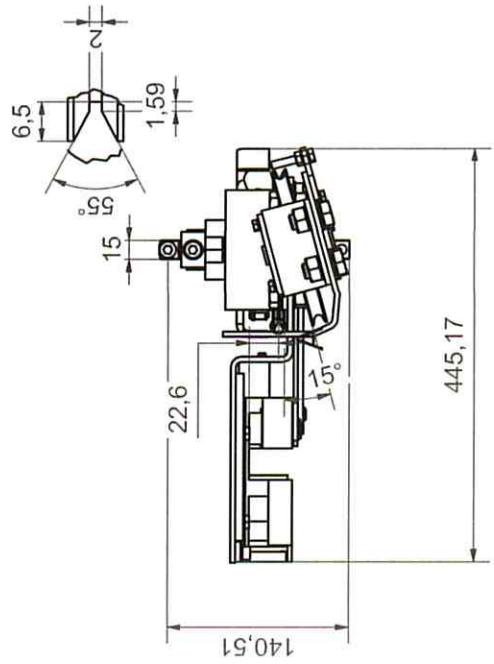
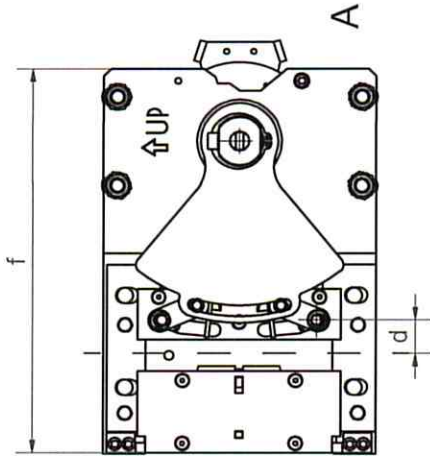
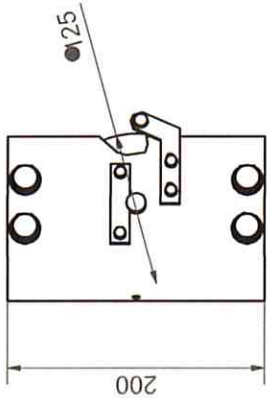


ATI / LV / 007 R0



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ATI / LV / 007 R0



CANTIDAD POR CONJUNTO:

Material:

Peso terminado:

Tto. to:

Tto. sup:

Fecha

Dibujado

Norma

Nombre



CONJUNTO: Quasar-T25

Quasar-T25

OBSERVACIONES:
MEDIDAS SIN TOLERANCIA SEGÚN DIN-7168 GM

PLANO COD. N°: DYN 61.C001.02

Escala:

Fichero:

Sustituye a:

Sustituido por:

CERTIFICADO DE EXAMEN DE TIPO TYPE-EXAMINATION CERTIFICATE

Número de certificado. / Certificate number	ATI / CA001	rev: 0
Organismo certificador. Certification Body	Asistencia Técnica Industrial S.A.E. (ATISAE) Avda. de los Artesanos, 20 E 28760 Tres Cantos MADRID (ESPAÑA)	
Clase. Tipo. Product. Type	Dispositivo de bloqueo externo para limitador de velocidad External tripping device for overspeed governor	
Modelo / Model	PARKING QUASAR ONBOARD;	
Fabricante. Manufacturer	DYNATECH. DYNAMICS AND TECHNOLOGY S.L. P.I. PINA DE EBRO, SECTOR C PARCELA 9 50750 ZARAGOZA.	
Propietario del certificado. Certificate Holder	DYNATECH. DYNAMICS AND TECHNOLOGY S.L. P.I. PINA DE EBRO, SECTOR C PARCELA 9 50750 ZARAGOZA.	
Fecha de presentación. Date of submission	20/01/2016	
Fecha del examen de tipo. Date of type examination.	20/04/2016	
Laboratorio de ensayo. Test laboratory	No aplicable	
Informe de ensayo Test report	No aplicable	
Norma de referencia. Standard of reference	EN 81-1/-2:1998+A3:2009; [9.11] EN 81-20:2014; [5.6.7] EN 81-21:2009, [5.5.2][5.7.2]	
Informe de ATISAE. / ATISAE report	MD_EVN_130016 (01.02.2013) MD_EVN_120003 (02.04.2012)	
Plazo de validez / Expiry date	Indefinido / (véase en el anexo técnico sección 2.4). Indefinite / (Please refer to technical annex section 2.4)	
Declaración:	<p>El componente "<u>dispositivo de bloqueo externo para limitador de velocidad</u>" evaluado, puede ser utilizado conjuntamente con el limitador de velocidad considerado dentro del alcance de este certificado de examen de tipo.</p> <p>Por razones legales, al no tratarse este de un componente de seguridad según el anexo IV de la Directiva 95/16/CE, este organismo no puede emitir un certificado de examen CE de tipo.</p> <p>Este certificado puede ser utilizado como justificación del alcance permitido por el sistema, cuando es integrado dentro del alcance del limitador de velocidad.</p>	
Statement:	<p>The assessed component "<u>external tripping device for overspeed governor</u>", may be used in connection with the intended overspeed governor within the scope of his type examination certificate.</p> <p>For legal reasons, provided that this component is not a safety component according to annex IV of Lifts Directive 95/16/EC, this agency cannot issue an EC type examination certificate.</p> <p>This certificate may be used as a justification of the allowable scope of the system, when assembled to the scope of the overspeed governor.</p>	




José Manuel Florez González
Director Técnico Elevación

Este certificado consta de esta portada, un anexo técnico de 2 hojas y 2 planos / documentos. Su reproducción carece de validez si no se realiza totalmente.
This certificate consists of this main page, a technical annex with 2 pages and 2 drawings / documents. It shall be reproduced with all its pages to be considered valid.

ANEXO TECNICO AL CERTIFICADO DE EXAMEN DE TIPO ATI / CA001 rev 0
 TECHNICAL ANNEX TO THE TYPE EXAMINATION CERTIFICATE ATI / CA001 rev 0

1. **Campo de aplicación:**
 Scope.

1.0. **Descripción:**
 Brief description.

Descripción del sistema.

El sistema PARKING QUASAR ONBOARD, es un sistema de bloqueo externo para el limitador de velocidad tipo QUASAR ONBOARD de DYNATECH (ATI/LV/007) el cual permite bloquear mecánicamente el limitador mediante la interposición de una pieza mecánica cuya posición es controlada mediante un electroimán, de manera que en ausencia de corriente (funcionamiento positivo) esta pieza se sitúa en la trayectoria de los centrífugos del limitador bloqueando su movimiento de giro incluso a muy baja velocidad. La posición de la pieza es monitorizada bien mediante un sensor inductivo de proximidad o un microinterruptor cuya señal puede ser gestionada por un sistema de control ajeno a este componente. La orden de bloqueo debe ejecutarla también un sistema de control ajeno a este componente.

Description of the system.

PARKING QUASAR ONBOARD system, is an external locking system devise for DYNATECH's QUASAR ON BOARD (ATI/LV/007) overspeed governor, which allows the locking of the governor by interposing a mechanical piece which position is controlled by an electromagnet, so when power supply to this electromagnet is cut off (positive working), the piece is located in the path of the governor's centrifugal elements, blocking the governor rotation even at very low speed. The position of the workpiece is monitored either by a proximity inductive probe or by a microswitch, with a signal that can be managed by a control system that is not part of the component. The locking shall also be commanded by a control system not included in this component.

Con objeto de evitar actuaciones no deseadas en procesos de carga y descarga, la pieza de bloqueo puede bascular en ambos sentidos de giro de la polea antes de producir el bloqueo del limitador.

In order to avoid unwanted tripping while loading or unloading the car, the locking element can pivot in both directions of rotation of the pulley before tripping the governor.

Los centrífugos tienen un borde saliente en la parte trasera (excepto para tipo LS). El objeto de este borde es reducir la distancia vertical equivalente máxima que es la distancia que podría bajar o subir la cabina antes de que se produjese un bloqueo efectivo del limitador.

The governor's centrifugal elements have a protruding edge at the rear (except for type LS). The purpose of this edge is diminishing the equivalent maximum vertical distance, which is the distance that could raise or lower the car before an effective locking of the governor.

El sistema PARKING QUASAR ONBOARD es un elemento independiente del propio limitador de velocidad y puede formar parte de un sistema UCM (movimiento no intencionado de cabina) como dispositivo de accionamiento del elemento de parada. El diseñador del sistema completo de protección puede tener en cuenta las condiciones relativas a las distancias y tiempos máximos adicionales que influyen en la distancia de parada cuando utilice este componente.

The PARKING QUASAR ONBOARD system is an independent device from the own governor and may be part of an UCM (Unintended Car Movement) protection system, as tripping device for the stopping element. The designer of the complete UCM system may take into account the following conditions regarding to the distances and additional delays that have influence on the stopping distance, when this component is used.

1.1. Distancias verticales equivalentes máximas.

Se calculan las distancias máximas verticales para cada tipo variante del limitador QUASAR, que son: estándar; BV (baja velocidad) y LS (muy baja velocidad).

Equivalent maximum vertical distances.

They are calculated for each type of QUASAR governor, which are: standard, BV (low speed) and LS (very low speed).

TIPO	∅ _{cable/rope} (mm)	L (mm)
Standard / BV	4.0	222.0
LS	4.0	209.5

1.2. Retardo del disparo.

Se obtiene un retardo máximo de 100 ms desde la orden de corte de corriente hasta que la pieza del disparador se coloca en la trayectoria de los centrífugos.

Trigger delay.

There is a maximum delay of 100 ms from power supply cut off until the trigger piece is located in the path of the governor's centrifugal elements.



1.3. Interfaz con el dispositivo de control / Interface with the control system

Electroimán / Electromagnet

Factor de servicio: 100%
Continuous rating

Tensión e intensidad nominal de servicio:
Rated current and voltage

	V (volt)	I (A)
DC	24	0.47
DC	48	0.23
DC	190	0.10

Sensor inductivo de proximidad.
Proximity inductive probe

Distancia de detección: hasta 4 mm;
Detection distance: up to 4 mm;
Sensor de 3 hilos / 3 wires probe
Voltaje operativo / Operative voltage: 12 ÷ 24 volts (DC)

Microrruptor.
Microswitch

RLEIL RLS 250V / 6A AC;

1.4. El dispositivo de disparo indicado en esta parte, podría ser utilizado también como dispositivo de accionamiento del sistema de pre-accionamiento de parada en instalaciones con foso o huida reducidos en el sentido dado en 5.5.2 y 5.7.2 de EN 81-21:2009.

The triggering device shown in this part might also be used as a device to operate the pre-triggered stopping system for lifts with reduced pit or headroom clearances in the sense given in 5.5.2 and 5.7.2 of EN 81-21:2009.

2. Notas.

Remarks.

2.1. El dispositivo PARKING QUASAR ONBOARD puede formar parte del conjunto de sistema de detención para un sistema UCM cuando se utiliza el limitador de velocidad para bloquear el paracaídas. El retardo total debe completarse con los retardos del resto de elementos del sistema de accionamiento del elemento de parada.

PARKING QUASAR ONBOARD may be part of the assembly of stopping system for an UCM system when the governor is used to trip the safety gear. The total delay shall be completed with those of the rest of the stopping element tripping system.

2.2. El sensor inductivo de proximidad puede utilizarse para controlar la posición de la pieza de bloqueo. Este control no es el 'autocontrol' al que hace referencia el artículo 9.11.3 de EN 81-1:1998+A3:2009 (artículo 5.6.7.3 de EN 81-20:2014). La posición de la pieza de bloqueo debe ser monitorizado por un sistema de control que impida el movimiento de la cabina si se detecta en posición de bloqueo para evitar la actuación no deseada del paracaídas.

The proximity inductive probe may be used in order to monitor the position of the locking piece. This monitoring is not related to the self-monitoring mentioned in clause 9.11.3 of EN 81-1:1998+A3:2009 (clause 5.6.7.3 of EN 81-20:2014). The position of the locking piece shall be monitored by a control system avoiding the car to put into motion if it is detected the locking position in order to avoid unwanted tripping of the safety gear.

2.3. Se adjunta a la presente certificación los siguientes documentos:

The following documents are enclosed to this certificate.

NÚMERO Number	FECHA Date	TÍTULO Title
DYN 61.C02.00	08/03/16	SISTEMA ANTIDERIVA QUASAR EMBARCADO (QUASAR SV)
DYN 61.C03.00	09/03/16	SISTEMA ANTIDERIVA QUASAR EMBARCADO (QUASAR T-25)

Estos documentos se adjuntan con objeto de proporcionar identificación e información sobre el diseño básico del componente de ascensor evaluado.

These documents are enclosed in order to provide identification and information about the basic design of the assessed elevator component.

2.4. Este certificado no tiene fecha límite de validez salvo que se produzcan cambios de diseño, cambios en la legislación o en la normativa aplicable. El fabricante deberá poner en conocimiento de este Organismo Notificado cualquier cambio de diseño previsto.

This certificate has not expiry date except if there are design modifications, changes in the applicable legislation or applicable standards. The manufacturer must communicate to this Notified Body any envisaged change of design.

2.5. Este certificado se emite dentro del ámbito voluntario para un componente de ascensor que no es de seguridad según el listado del anexo IV de la Directiva 95/16/CE, razón por la cual no se puede emitir un certificado de examen CE de tipo.

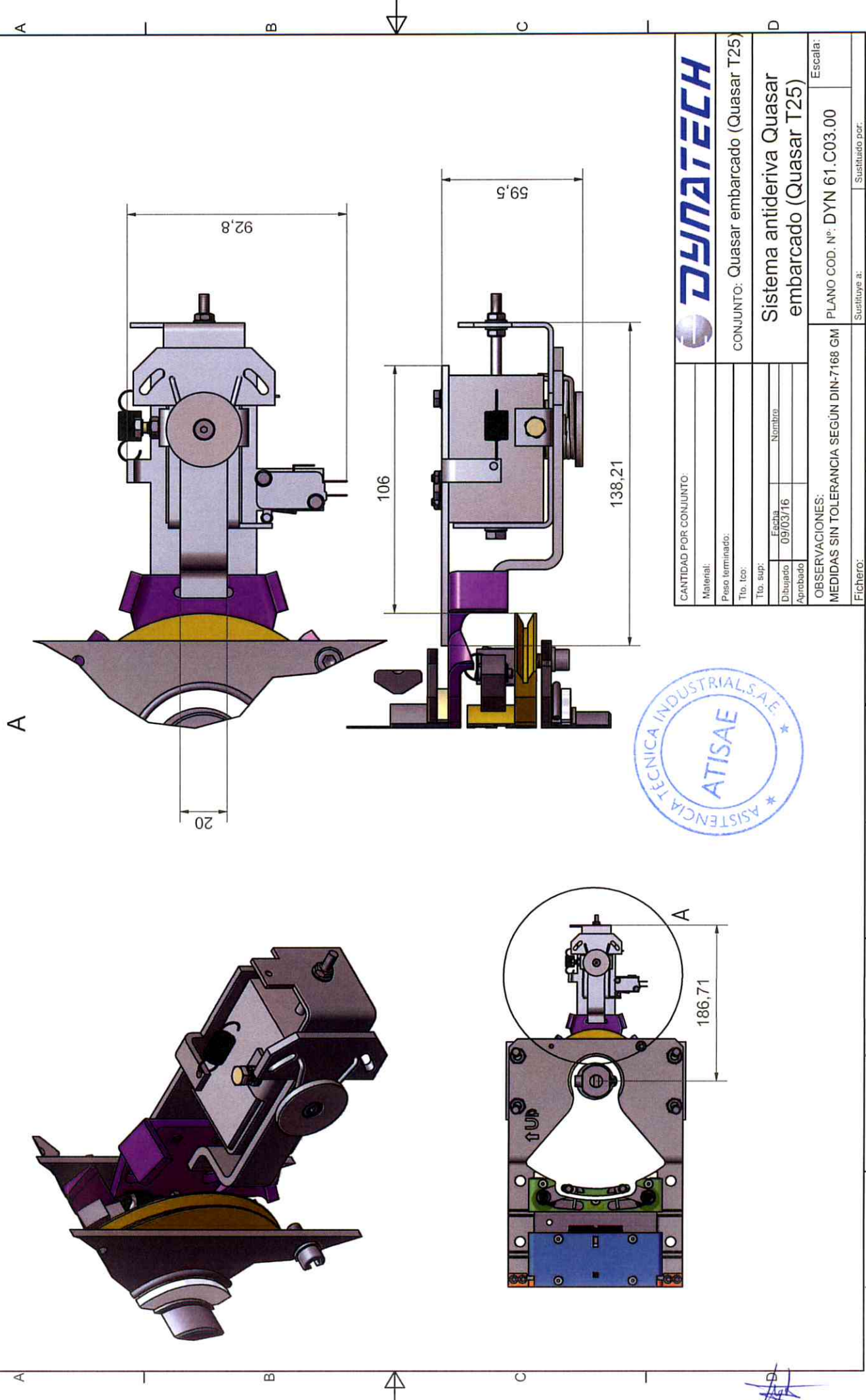
This is a voluntary certificate for an elevator component that is not a safety component according to the list given in annex IV of the Lifts Directive 95/16/EC, so an EC type examination certificate cannot be issued

2.6. Este certificado está orientado al uso exclusivo junto con el limitador de velocidad QUASAR ONBOARD según certificado de examen CE de tipo ATI/LV/007. Cualquier uso con otro limitador debe someterse a evaluación previa por este organismo.

The aim of this certificate is to be used only in connection with the overspeed governor QUASAR ONBOARD as per EC type examination certificate ATI / LV / 007. The use of the assembly with any other governor shall be previously assessed by this certification body.

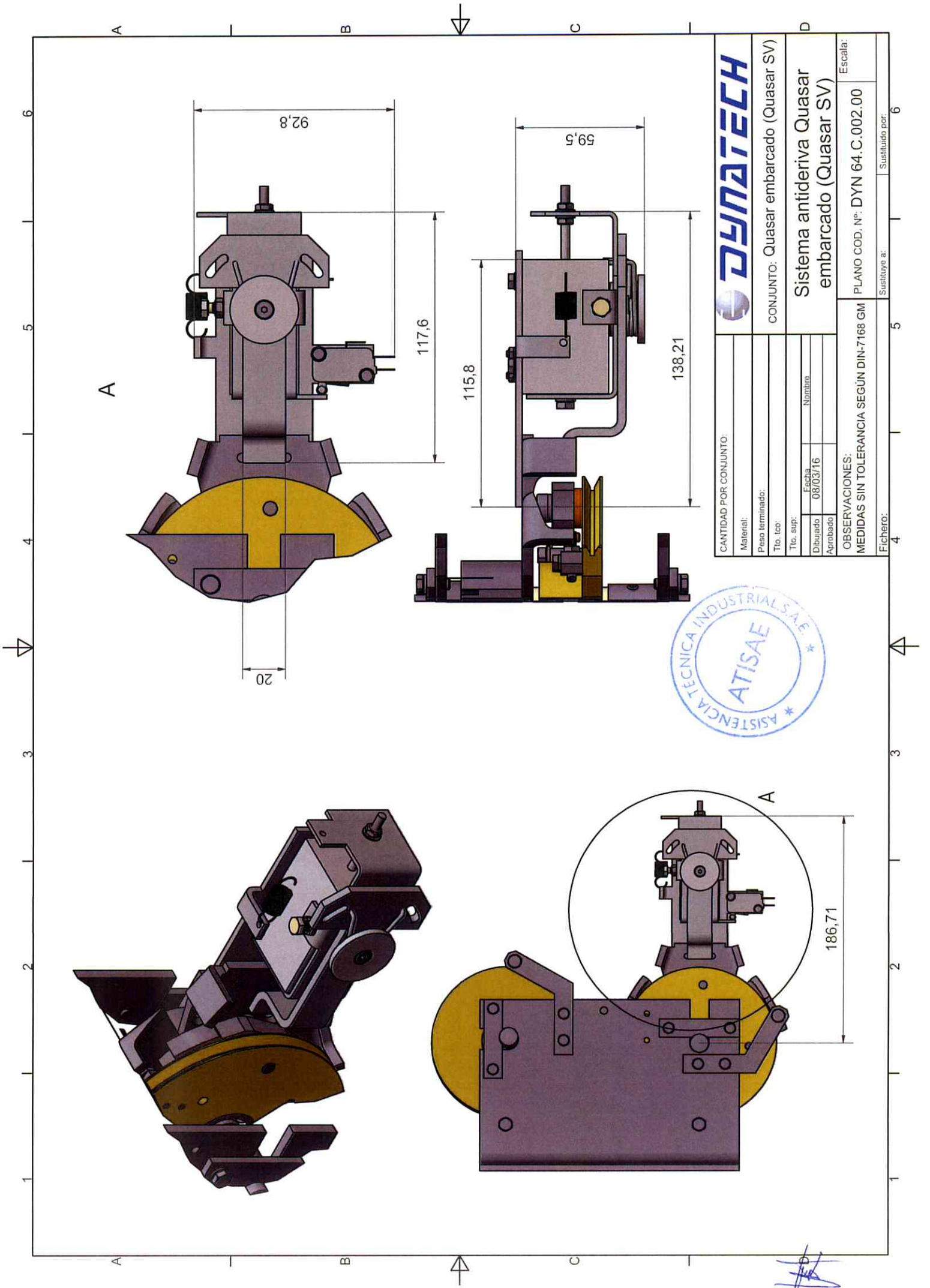
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CANTIDAD POR CONJUNTO:		DYNATECH	
Material:		CONJUNTO: Quasar embarcado (Quasar T25)	
Peso terminado:		Sistema antideriva Quasar embarcado (Quasar T25)	
Tto. tco:		Escala: PLANO COD. N°: DYN 61.C03.00	
Tto. sup:		Fichero: 4	
Dibujado: 09/03/16		Sustituye a: 5	
Aprobado:		6	
OBSERVACIONES: MEDIDAS SIN TOLERANCIA SEGUN DIN-7168 GM			

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CANTIDAD POR CONJUNTO:		DYNATECH	
Material:		CONJUNTO: Quasar embarcado (Quasar SV)	
Peso terminado:		Sistema antideriva Quasar embarcado (Quasar SV)	
Tto. tpo:		Escala:	
Tto. sup:	Fecha:	PLANO COD. N°: DYN 64. C.002.00	
Dibujado:	Nombre:	Sustituye a:	
Aprobado:		Sustituido por:	
OBSERVACIONES:		4	
MEDIDAS SIN TOLERANCIA SEGÚN DIN-7168 GM		5	
Fichero:		6	

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INSTRUCTIONS FOR USE AND MAINTENANCE

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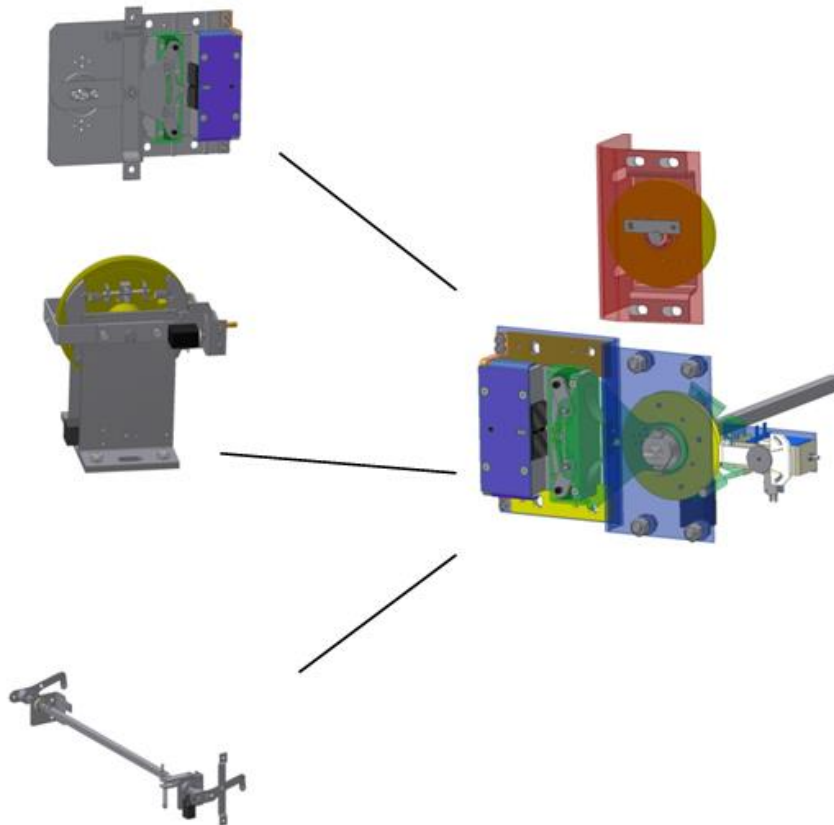
1 GENERAL INSTRUCTIONS

Quasar T25 emerges from the combination of three Dynatech's products: Quasar governor, ASG safety gear and its T-25 steering mechanism.

Quasar governor is a small governor (120 mm of diameter for a 4-mm rope). It was designed so as to save space.

Quasar-T25 is an easy to install Governor-Safety Gear hybrid since its anchoring holes are the same as ASG-T25's ones.

This way, the installation of safety equipment is made easier for customers since they have three components in one.



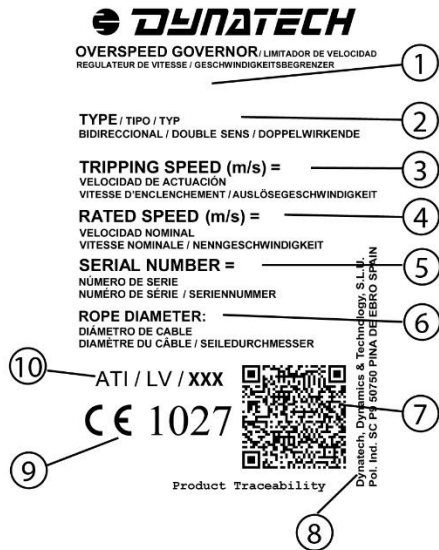
Quasar-T25 houses the governor and steering mechanism along with some tensioning devices.

It is strictly forbidden:

- a) To modify or replace the overspeed governor adjustment spring.
- b) Use an overspeed governor in a lift for which it is not intended, or whose features do not correspond to those marked on the lift (e.g. nominal speed or rope type).
- c) To adjust any component of the overspeed governor, except for those parts specified in the manual.

DYNATECH DYNAMICS & TECHNOLOGY, SL will not be liable for any damage caused by failure to observe any of these general conditions.

2 OVERSPEED GOVERNOR IDENTIFICATION



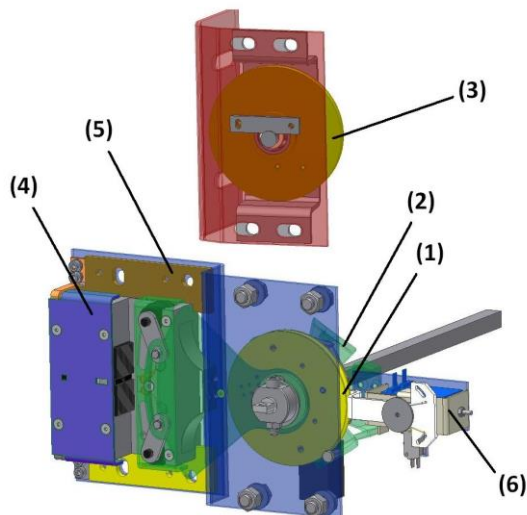
OVERSPEED GOVERNOR IDENTIFICATION LABEL			
1	Governor model	6	Rope diameter (mm)
2	Governor type	7	QR product traceability code
3	Performance speed (m/s)	8	Dynatech address
4	Rated speed (m/s)	9	Quality assurance CE marking and notified body number
5	Serial number	10	EU type examination certificate number

3 MAIN COMPONENTS.

A diagram including Quasar-T25's main components is displayed below.

Where:

- (1) Main Pulley.
- (2) Locking system
- (3) Diverter pulley.
- (4) Safety gear
- (5) Steering mechanism and attachment
- (6) Anti-creep system / Remote tripping



4 WORKING PRINCIPLES.

4.1 LOCATION AND INSTALLATION

Quasar governor is of a centrifugal type and may operate both moving **downwards** and **upwards**.

In the Quasar – T25 configuration, the governor is incorporated along with the steering mechanism and the safety gear. The governor's locking part is mechanically coupled to the steering mechanism's shaft, therefore, when the governor interlocks, the locking part rotate the steering mechanism's shaft and the latter operates the safety gear.

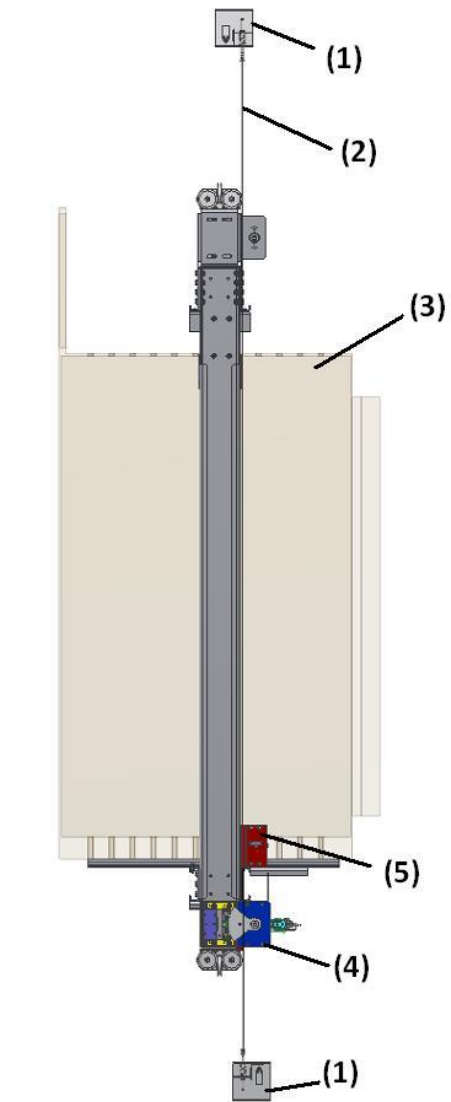
The governor in the Quasar-T25 assembly is of the "on-board" type. This means that the governor travels along with the car and the rope remains static (unlike a conventional governor).

The rope is in an open circuit, both ends being tensed by spring-tensioning devices.

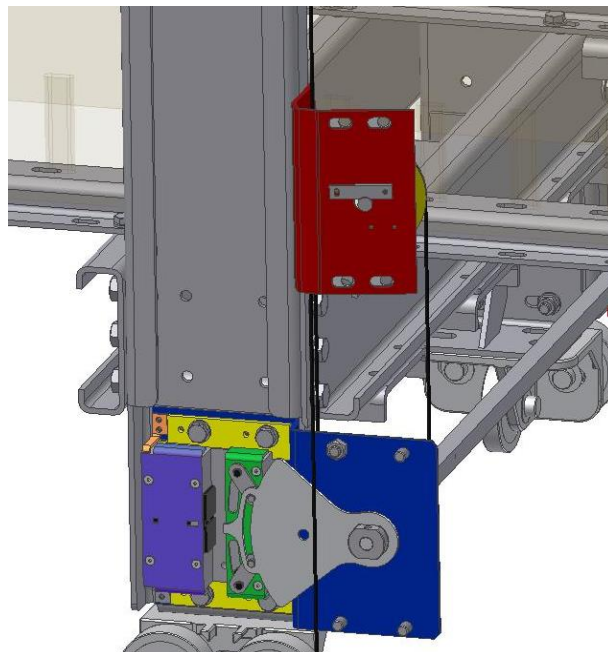
The assembly is anchored to the frame's upright by four screws. The return part will be anchored to the upright at the height determined by the installer.

A diagram of the unit assembly is displayed below.

- (1) Spring tensioners
- (2) Governor's rope
- (3) Lift's car
- (4) Quasar-T25
- (5) Diverter pulley



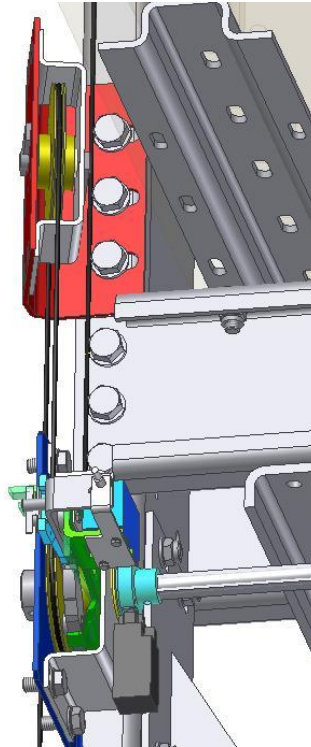
The following picture displays a close-up of the assembly anchored to the frame.



As can be seen in the figure, the Quasar-25 assembly is anchored by using four M12 8.8 screws (the length of the screw will depend on the frame's upright thickness).

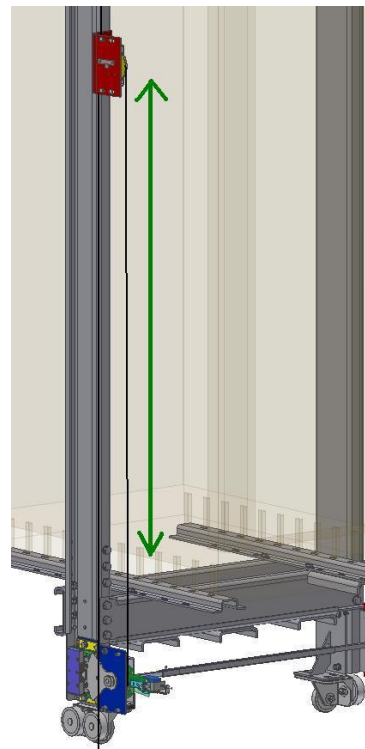
The picture displays a close-up of the return part's fixing.

Three M16 8.8 screws are used for anchoring. Their length will depend on the upright's plate thickness.



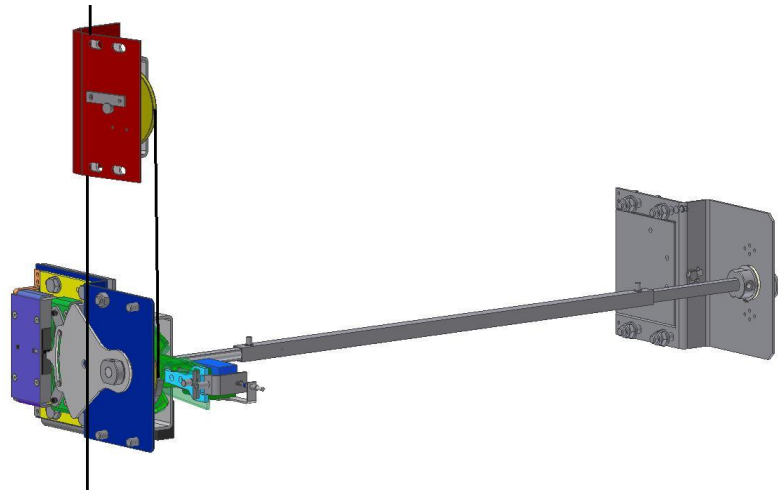
This return part is independent from the main part; therefore, it may be fitted at the height you wish.

It should also be noted that the return part may either be fitted above or below the Quasar-T25 assembly. (See section 4.1.1 in this manual).

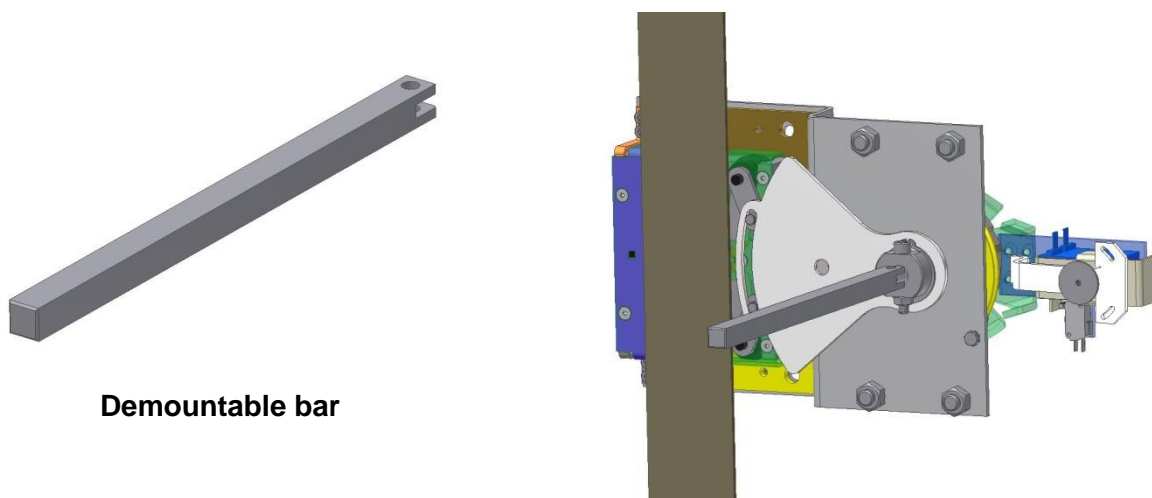


The drawing on the right displays the entire Quasar-T25 assembly attached to the other ASG-T25 via a coupling bar.

Quasar-T25 is on the left.



It should be underlined that the assembly is also valid to be fitted onto inverted guide rails; just fit the steering mechanism's shaft onto the other side (See the following figure).



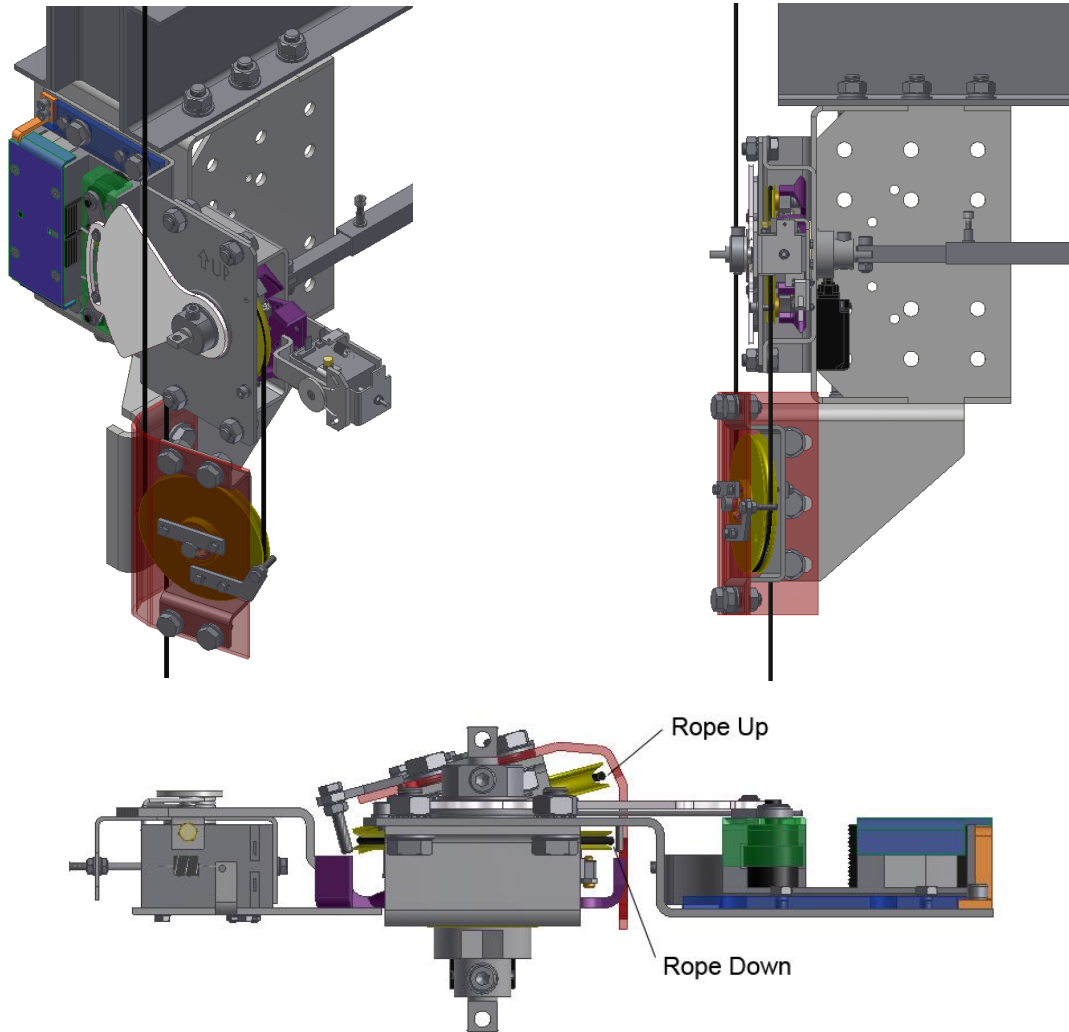
Demountable bar

The range of interlocking rails covered by the Quasar-T25 is from 600 to 3000 mm.

Note: If required, the client may ask for the right-hand Q-T25+ASG unit. If the side is not specified in the order, Dynatech will supply the left-hand speed governor by default.

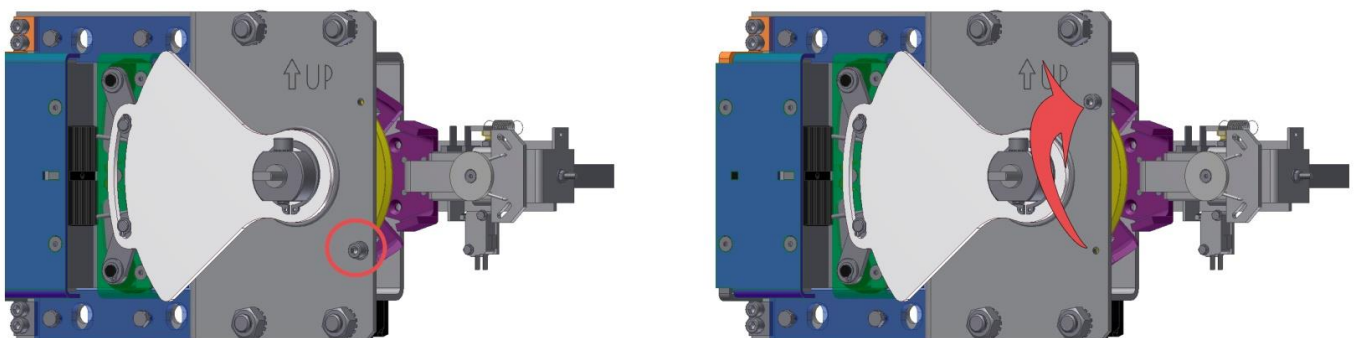
4.1.1 PLACING A RETURN PULLEY UNDER THE QUASAR-T25

As mentioned above, the return pulley can be placed below the main body of the Quasar T-25. The position of the pulley should be as shown in the images below.



Once the overspeed governor rope is assembled on the Quasar T-25 unit with this configuration, check that the main pulley rotates properly to ensure the safety gear operates in both the upward and downward direction.

In general, the Quasar T-25 overspeed governor is factory assembled with a DIN 912 M6x16 screw threaded at the bottom of the Quasar T-25 support (see image on the left). The function of this screw is to ensure the overspeed rope stays within the pulley. When the return pulley is assembled below the main assembly of the Quasar T-25, the screw position must be changed to the hole provided for this at the top of the support, as shown in the right-hand figure of the image.

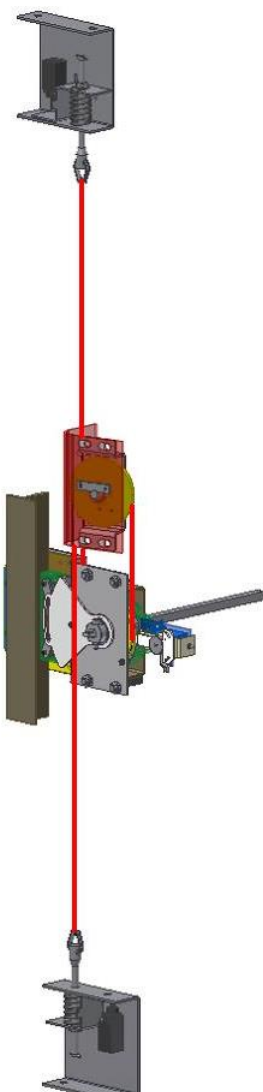
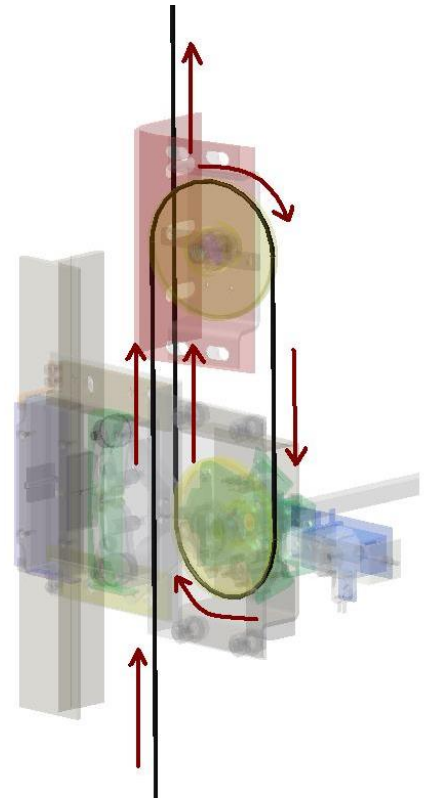


4.2 ROPE AND TENSIONING SYSTEM

One of the features of the governor is the rope. This rope has a 4-mm diameter. The rope must be approved to be used with 120-mm pulleys. In the case of Quasar governor, the approved rope is STX by Pfeifer Drako.

As previously mentioned, the rope forms an open circuit. Both ends are tensed by two spring devices.

Some figures displaying the rope movement along the pulleys can be seen below in order to better understand the rope's installation.



The figure on the left, displays the rope (in red) being tensed by two spring devices.

It displays the rope going from the lower tensioner, through the diverter pulley, encircling the main pulley and returning towards the upper tensioner.

It is extremely important to maintain the correct tension, since if the rope is not tensed enough, the governor's pulley will not have sufficient adherence and, therefore, it will not operate.

On the other hand, the rope tension must not be exceeded, as this will cause wear in the pulley and a reduction in the rope's lifespan that must be taken into account.

Please pay special attention to the steel rope's installation. Both branch lines must be as straight as possible to prevent vibration in the pulleys and wear in the pulleys.

Rope tensioning

The rope is tensioned via two tensioning devices respectively located at the top and bottom.

This is a mechanism that tensions the rope via a compression spring.

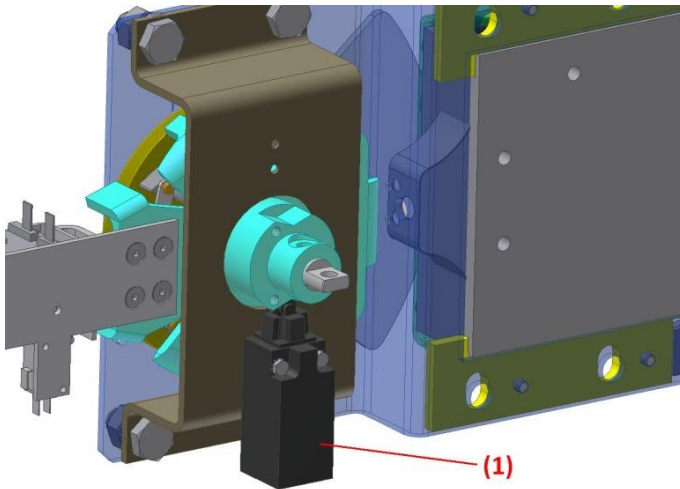
The required tension is obtained by compressing both springs via the mechanism's nut.

The tensioning devices record a maximum and minimum tension. Minimum tension is ensured by the detensioning contacts assembled onto these devices. These contacts connected in parallel would cut a safety line in case of reduction of minimum tension or rope breakage.

For further information on the Quasar T-25's tensioning devices, please refer to the Quasar-T25's Tensioners manual.

4.3 OVERSPEED CONTACT.

The governor incorporates an overspeed contact. Bearing in mind that the governor will be fitted in the car, this is an automatic reset contact. In any case, after an interlocking, the lift must be started by a qualified person without having to directly access the governor.



An image of the overspeed contact's location is displayed below; where (1) the automatic reset contact is located.

Once the governor and, therefore, the safety gear have been interlocked, when unjamming the safety gears, the return spring will return to its initial resting position and, therefore, the overspeed contact will reset on its own.

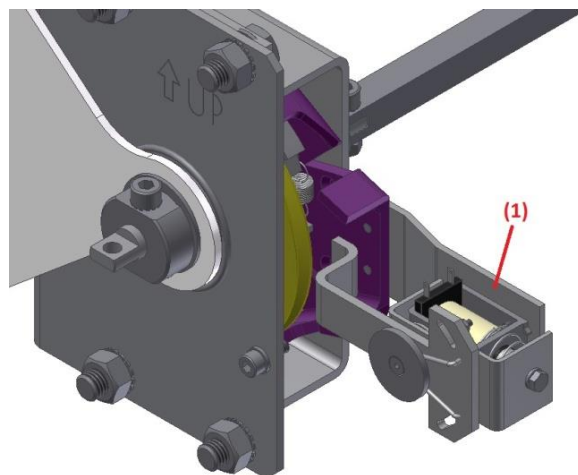
4.4 REMOTE TRIPPING

The governor incorporates a remote jamming system to check for the correct interlocking of the governor and the subsequent jamming of the safety gear.

It is basically made up of a remote electromagnetic interlocking system that may be operated from the machine room. There are three versions available for the installer to choose at his/her convenience.

- **24 V DC** (Direct current) coil. A **0.47 A** current must be guaranteed.
- **48 V DC** (Direct current) coil. A **0.23 A** current must be guaranteed.
- **190 V DC** (Direct current) coil. A **0.1 A** current must be guaranteed.

Some pictures of the system as well as its location within the unit (1) are displayed below.



4.5 QUASAR LS GOVERNOR

There is a low speed QUASAR governor called QUASAR LS.

Its minimum tripping speed is 0.3 m/s.

This is a UNIDIRECTIONAL governor and its tripping speed range is: 0.3 – 0.65 m/s

It is essential to bear in mind that the governor for these tripping speeds is unidirectional.

4.6 UCM UNCONTROLLED MOVEMENT DEVICE

As a result of applying the new lift standard EN 81-20 and EN 81-50, the Quasar governor incorporates a system that may be used to prevent the car uncontrolled movement (UCM).

This system is called Parking System (or anti-creep system).

The anti-creep system consists of a unit made up of a ratchet that makes the centrifugal system lock if it is in resting position.

The system incorporates an electromagnet and its duty is to remove the ratchet whenever the car is moving so as to prevent the ratchet from interlocking when the governor is moving.

This duty of locking and unlocking the governor is carried out thanks to this electromagnet and a mechanism, made up of a shaft and a sliding belt.

Therefore, the system operates in positive safety (it is a proactive mechanism), which means that in case of a power cut; the system always locks the governor.

The coil fitted is an electromagnet that, according to the customer's needs, may be 24V, 48V or 190 V (all the direct current voltages available).

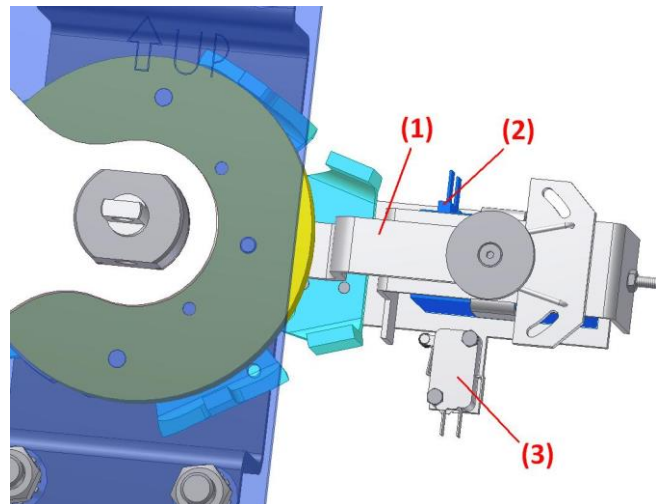
Continuous rating is 100% in all voltages.

When a coil does not have power, the ratchet returns to its resting status thanks to the compression spring inserted in the shaft; this way, the ratchet remains at the governor's locking position.

The figure displays the Quasar-T25 and anti-creep system assembly.

Where:

- (1) Parking ratchet
- (2) 100% electromagnet
- (3) Control micro-switch



According to the EN 81-20 and EN 81-50 standard, the car must stop when an uncontrolled movement occurs within certain margins.

The governor in itself is unable to meet requirements. Apart from the governor, safety gear is required and the fitter must therefore perform the appropriate tests to ensure the points of the standard are met.

Please see the website and download the manuals for safety gear specifications for the UCM

In the event of uncontrolled car movement, the governor and the parking system will transmit the force to the safety gear in order to stop the car.

The maximum governor locking distances for the different types of cable are **220 mm**. The response distance of the linkage and the safety gear must be added to this distance. The sum of all the distances must be within the margin established in the standard.

The distance of the governor may be shorter than that indicated, depending on the position of the locking part in the centrifugal system.

The parking device is fitted with a mechanism that provides a tolerance of ± 20 mm in terms of car loading and unloading.

Occasionally, the centrifugal system of the governor pulley could stop right next to the parking system locking pin (in standby) at one of the lift stops. This mechanism would avoid any engagement due to a difference in level of the car in both directions.

Note: For installations where the creep may be greater than 20 mm, it's important to indicate that the installation of a D-Box allows for a greater creep, since the interlocking plunger stays up

Note: Dynatech holds a certificate for the UCM unit in the Quasar-T25 along with any safety gear in the ASG series and the D-Box electronic box. For further information, please visit our website.

4.6.1 ANTI-CREEP SYSTEM'S CONTROL SENSOR

As can be seen in the previous figure, there is an anti-creep system along with the control micro-switch.

This device is a contact in a reduced size. This micro-switch's duty is to monitor the system, so that, if the anti-creep system does not unlock the governor due to a mechanical or electrical failure, the car will not start moving.

This way, the problems that an unwanted tripping of the safety elements may cause are avoided.

4.6.2 UCM WARNINGS.

The anti-creep system requires the lift controller to be able to manage the functions that the anti-creep system uses, such as the coil power, control sensor monitoring and manual rescue. If the controller is unable to manage these functions, Dynatech offers the possibility of installing an electronic module, D-Box. For more information, see the website.

If the D-Box is not used, please observe the following warnings and follow the recommendations below for proper controller design.

Note. It is highly recommended that the **controller designer** contacts Dynatech before designing the circuit to manage the anti-creep system, to clarify any doubts regarding connections and to be recommended a specific solution for their installation

- **Locking the overspeed governor** after UCM can be done by either of the following 2 methods: 1) Detecting the UCM or 2) Letting the anti-creep system act.
 - 1) To detect the UCM, either a sensor needs to be placed on each floor or, as is the case with the D-Box, a levelling signal needs to be used. Therefore, if the car creeps with the doors open, the sensor detects it and cuts off the current to the anti-creep system coil, thus locking the overspeed governor.
 - 2) In this case, the anti-creep system clamping device is locked at each floor in the installation. When the lift moves, the anti-creep system coil is excited and releases the overspeed governor. Then, once the car reaches one of the floors, the current to the coil is cut, leaving the anti-creep system in the locked position.
- The D-Box has a feature whereby, when the elevator reaches a floor, **current continues through the coil for a set time**, usually 10 minutes, if the lift does not receive another call. After this time, the anti-creep system locking device is activated. This correction is due to the VDI 4707 Part 1 (German lift energy efficiency standard) which establishes a period of 5 minutes before stand-by. Thus, the anti-creep system performs fewer on-off cycles, thereby increasing its useful life. This is helpful in periods when there is heavy traffic, as it prevents the anti-creep system from repeatedly locking and unlocking the overspeed governor. It must be remembered that a UCM sensor will need to be installed if the anti-creep system works this way.
- **It is recommended to over-excite the coil** with a voltage slightly above nominal for less than one second to ensure the anti-creep system unlocks. Once it is unlocked and the lift begins to move, the supply voltage should be reduced during the journey to lessen the coil heating. Also, if the choice of keeping the coil excited while the lift is at a floor is taken, the voltage to the solenoid can also be lowered. This saves energy and improves the energy efficiency of the lift. Below is a table of recommended voltages.

	Over-excitation	Voltage during travel	Voltage at floor
24	30	20	12
48	60	40	30
190	215-205*	150	104

* This is the voltage at the rectifier output, which can vary between the values shown.

- To ensure proper operation of the device, it is advisable to design a circuit such that, if the inductive sensor does not detect the anti-creep system unlocking, the controller **will try more than once to supply current to the coil** (the Dynatech D-Box makes 7 attempts before the error message appears that no reading for the control sensor is detected). Thus, if there is any mechanical fault preventing the sensor from being read, the same attempts to solve the problem will be made before an error message appears on the controller.
- To prevent the car from stopping due to the loss of the control sensor signal while travelling, it makes a reading only at the floors.
- **In the event of a cut in the electricity supply** to the electric magnet coil when the car is moving, the speed governor will lock and the safety gear subsequently engaged.

The installation of an autonomous power system is recommended to avoid undesired engagement in the event of a cut in the mains electricity supply.

- Open the pin to enable the speed governor to turn for **automatic rescue**. If the pin is not released, the governor will lock and the safety gear will engage during the rescue movement.
- Use **in installations with re-levelling over 20 mm**: in installations with re-levelling over 20 mm, certified switching must be used to activate the electric magnet during the re-levelling process because if it re-levels by more than 20 mm then the governor could lock and the safety gear engage. In this case, the switching must discriminate between re-levelling and an uncontrolled movement.
- Use in installations with door pre-opening: in **installations with door pre-opening**, certified switching must be used to ensure the electric magnet remains activated during the pre-opening process because if the electric magnet does not remain activated then the governor could lock and the safety gear engage. In this case, the switching must discriminate between pre-opening and an uncontrolled movement.

4.6.3 THE PARKING SYSTEM AS REMOTE CONTROL

The parking system can be used as remote control.

Operations are the opposite to those of the parking system, as it unlocks the governor when the lift is running under normal conditions.

The purpose of the remote control system is to lock the governor when the lift is moving. This takes place during engagement tests. On locking the governor, the safety gear is forced to operate.

To do so, a button must be installed on the control panel that disconnects the current to the parking system coil.

As indicated above, the parking system unlocks the governor by powering the solenoid valve in this system. If the governor is to be locked while the car is operating normally, this solenoid valve must be disconnected so that the parking system locks the governor.

There are two options available:

- To install a pushbutton on the controller to disconnect the parking system.
- To install the D-Box. Apart from managing signals for UCM, it also allows using the parking system as a remote tripping device

4.6.4 ANTI-CREEP SYSTEM MAINTENANCE

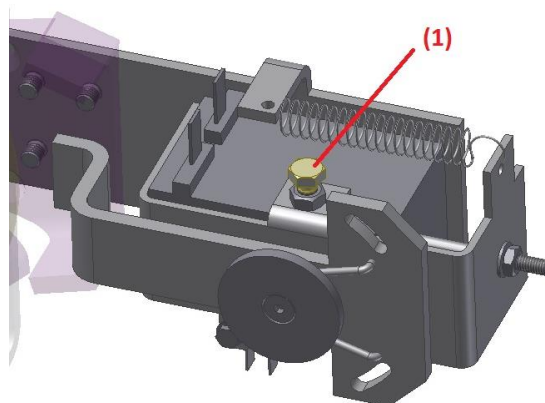
It is very important that the anti-creep system is in the best possible condition. As it is a mechanism that will perform many cycles over its lifetime, it is advisable to check its condition and operation during lift maintenance.

The anti-creep system should be kept as free of dust and dirt as possible, to ensure the moving parts are not obstructed. It should be checked and cleaned of dirt if necessary. After cleaning, a lubricant should be applied to increase the mechanism life.

The parking system has a translation movement. This movement should be as smooth as possible. For this purpose, the nylon screw (1) rests on the solenoid edge.

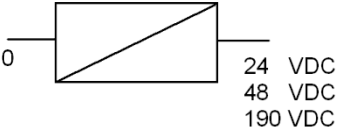
Manually check that the system slides smoothly. If necessary, re-tighten the nylon screw so that it rests on the metallic edge of the solenoid.

If required, a few drops of lubricant may also be added at this point.



4.6.5 TECHNICAL FEATURES

- Electromagnet: Coil with a 100% continuous rating

Voltages (V)	I (A)	<p style="text-align: center;">100 %</p> 
24 DC	0.47	
48 DC	0.23	
190 DC	0.10	

- Micro-switch:

RLEIL RL6 -1-F-BK-P8-4

Micro-switch with Normally open (NO) and Normally closed (NC) contacts.

Specifications :

16(4)A 250V T85 1E4

16A 250V/250VAC T105

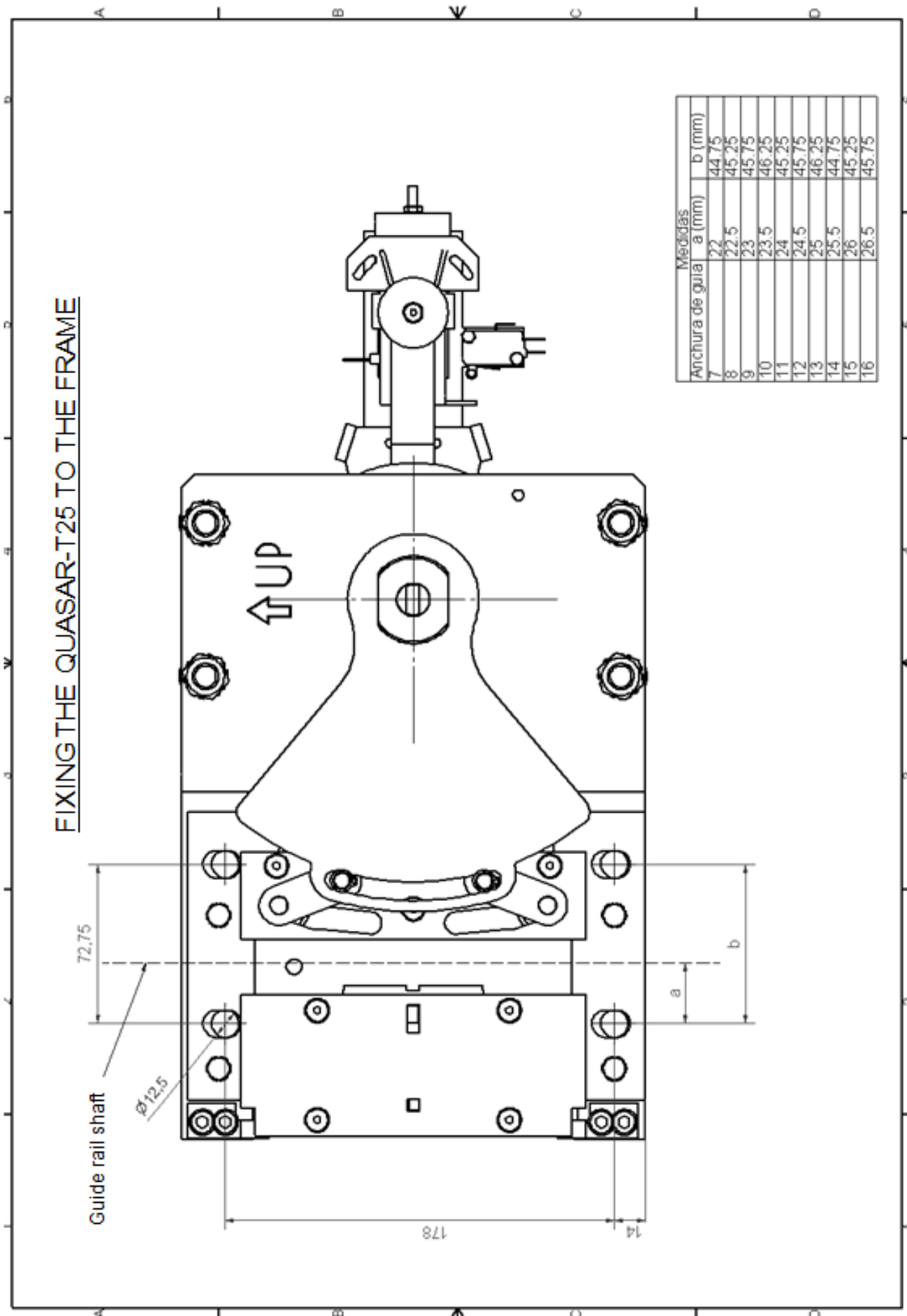
- Maximum response distance (**only for the governor**): 220 mm
- Mechanism allowing a ± 20 mm movement when loading and unloading.
Greater than 20 mm installing a D-Box.

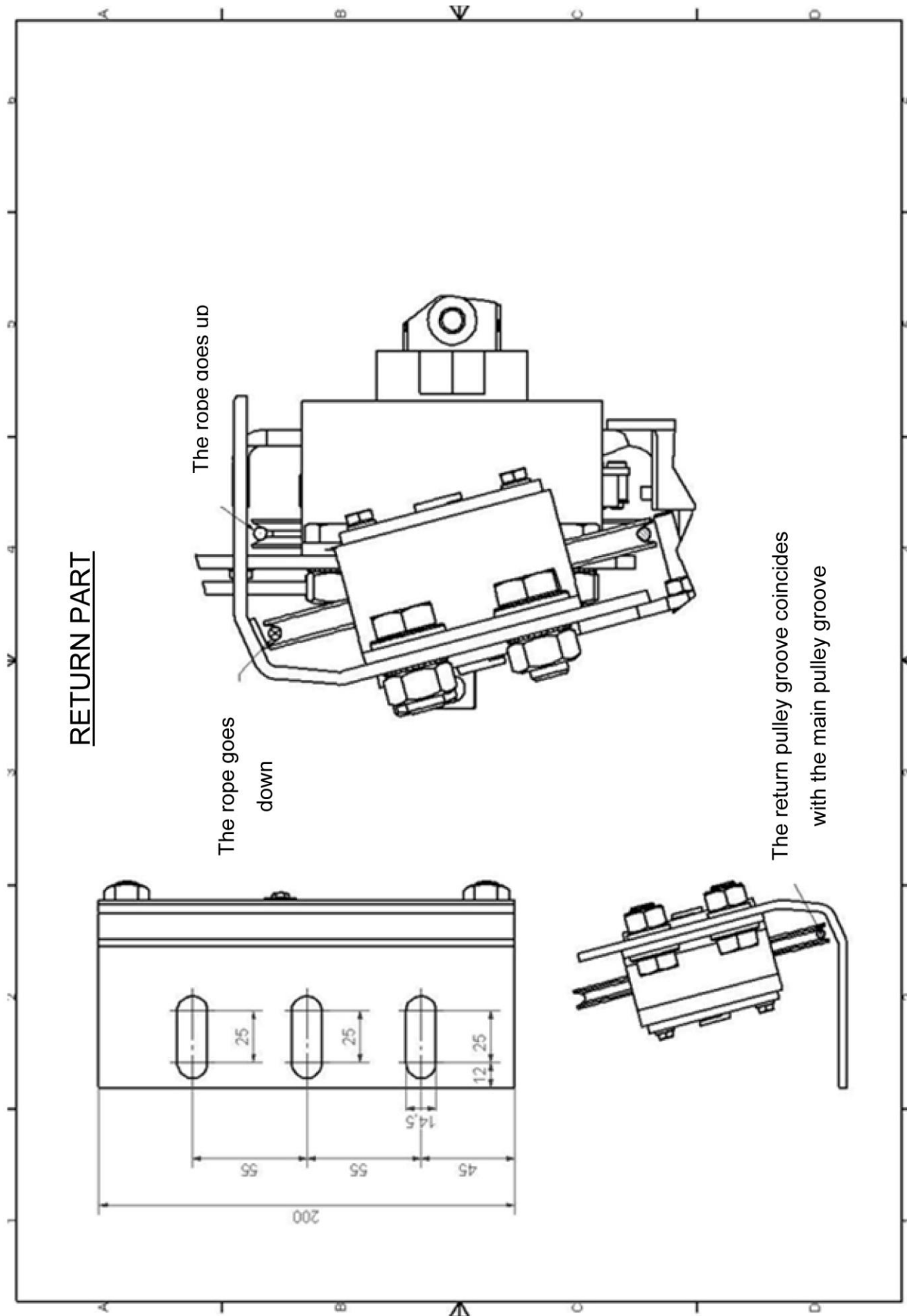
5 FIXING TO THE FRAME

Please find below some pictures and sketches to install the Quasar T-25 unit.

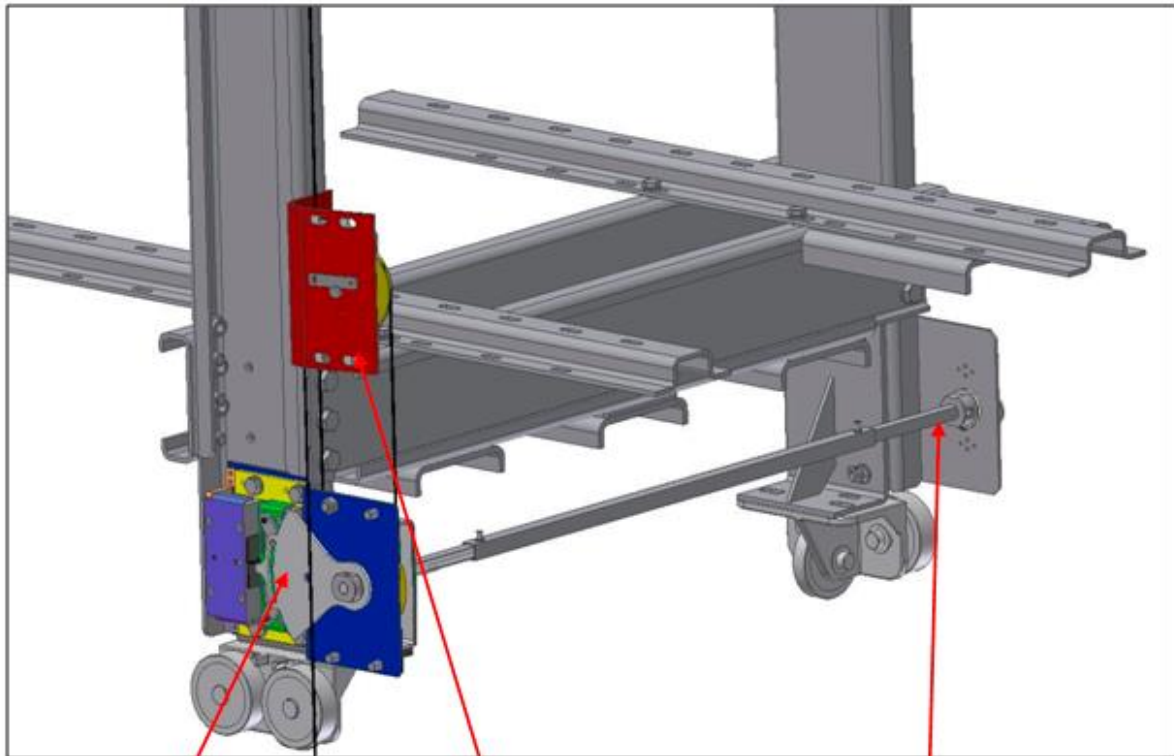
On the one hand, there is the Quasar governor and ASG safety gear assembly and, on the other hand, there is the governor rope return assembly.

The bidirectional version is shown.





There are three main components to be fixed to the frame.



Quasar-T25:

Unit housing the Governor and the safety gear.

Anchored to the frame via 4 screws.

QT25 Return:

Governor rope's return pulley unit.

Anchored via three M14 screws.

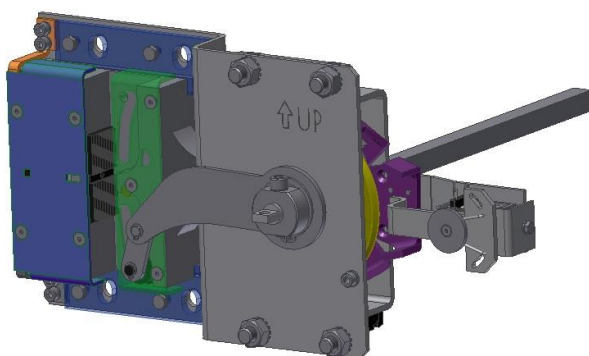
It can be fitted along the frame's beam.

ASG-T25:

Safety gear + Dynatech's standard steering mechanism unit.

Anchored via four screws.

The unidirectional version is shown below



QUASAR-T25

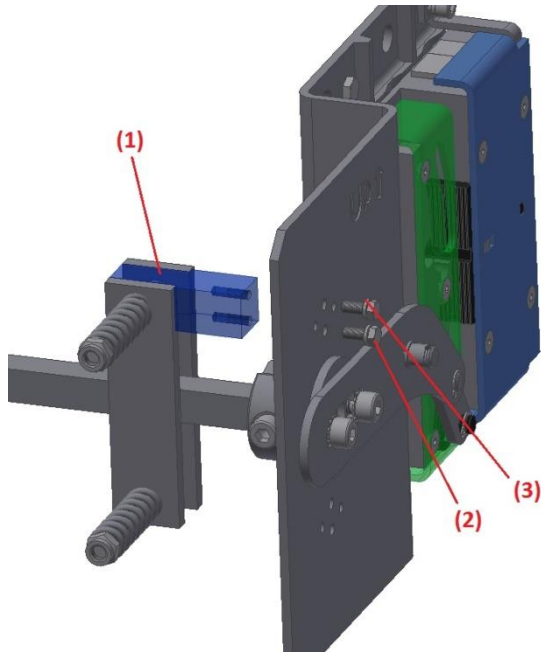
The image on the left shows the unidirectional Quasar-T25 unit.

Unlike the bidirectional version, this model does not have a built-in spring; therefore, the spring system should be installed independently.

A unidirectional Quasar-T25 is placed onto the frame in exactly the same way as the bidirectional version.

The difference is in the assembly of the spring system.

This spring system will be installed in the part of the safety gear that does not hold the governor. Please find below some images.



ASG-T25

To assemble the spring system (1), use two DIN 933 M5x12 screws (2) and two Grower DIN 127 M5 washers (3).

Note: The tensioning system is supplied with the nuts loosened in order to make assembly easier. Once the unit has been attached, tighten the auto-lock M8 nuts until they make contact with the two DIN 931 M8x100 screws. This way the driving bar returns once the safety gears have been tripped.

6 TECHNICAL FEATURES

- **Machine:** Overspeed governor + Safety gear hybrid
- **Model:** Quasar-T25
- **Manufacturing company:**
DYNATECH, DYNAMICS & TECHNOLOGY, S.L.
- **Range of use:**
Maximum rated speed: 2.00 m/s
Maximum tripping speed: 2.33 m/s
Minimum rated speed: 0.1 m/s
Minimum tripping speed: 0.3 m/s
From 0.3 a 0.69 m/s, the Governor is UNIDIRECTIONAL
From 0.7 a 2.33 m/s, the Governor is BIDIRECTIONAL or UNIDIRECTIONAL
- **Rope:** DRAKO STX
Diameter: 4 mm,
- **Rope pre-tensioning:**
Via the spring tensioner devices, the following are obtained:
Minimum tension: 491N (below this tension, the contact cuts the safety line).
Maximum tension: 745 N. (The tensioner plate's position determines this tension.)
- **Pulley diameter:** 120 mm
- **Overspeed contact.**
- **Remote unlocking by default:**
- **Anti-creep system to comply with UCM:**
It is recommended to use the D-Box when using this device.
- **Diverter pulley:** To be fitted onto the frame by the customer.
- **Safety gears that may be incorporated into the Quasar-T25 assembly**
ASG-100 / 120 / 121 Series
ASG-100UD / 120UD / 121 UD Series

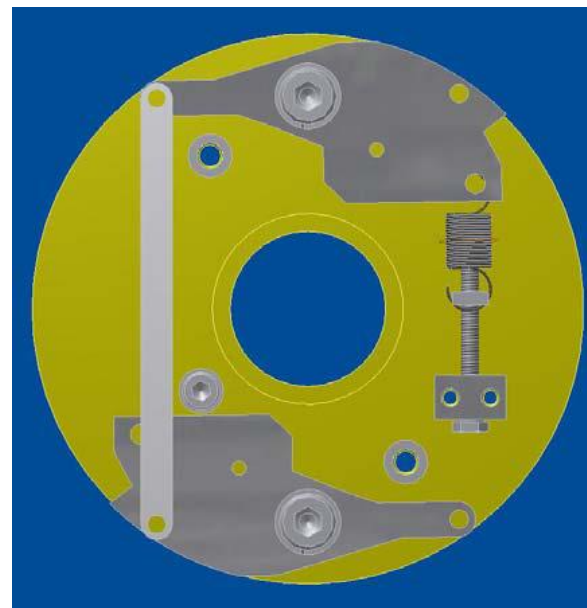
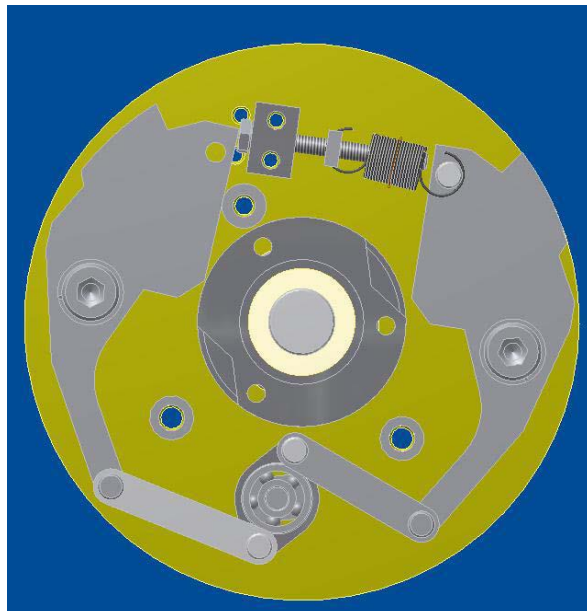
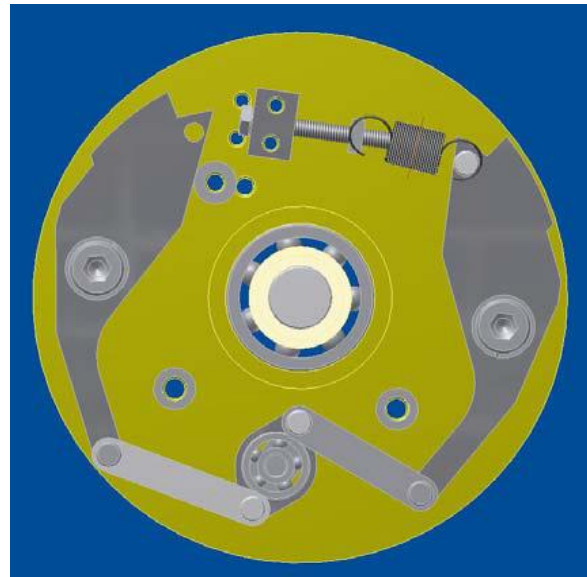
7 TYPE OF ADJUSTMENT

The tripping speed is adjusted via a regulating screw that tensions or de-tensions the springs in the centrifugal system. When tensioning the springs, the speed required to activate the centrifugal system will be higher. This way, the tripping speed can be adjusted within the speed range.

This adjustment is made at the factory via a computerised gauging system according to the customer's needs. Once adjustment has been completed and checked, it is sealed so as not to be modified.

For tripping speeds below 1 m/s, there is a Low Speed System, Quasar BV, where, as displayed in the figure, adjustment is made via an adjusting screw that expands or compresses the spring engaged to the centrifugal system.

According to what has been previously mentioned in section 3.5, there is a model called Quasar LS. This model was designed to reach lower tripping speeds. It is a unidirectional design.



8 INSTRUCTIONS FOR USE AND MAINTENANCE

Tripping speed in the installation can be checked by operating on the motor's frequency converter; progressively increasing the motor's speed until interlocking occurs.

To prevent unnecessary risks that may cause the incorrect operation of the governor, two essential criteria must be considered: Cleaning and monitoring against corrosion. There are mobile elements in any governor that will perform the interlocking operation. Dirt accumulation in these elements may cause malfunctioning. It is essential that both the installer and maintenance make sure that these components are perfectly clean.

On the other hand, Dynatech governors have anti-corrosion protection in all the cases; however, it is important that maintenance checks if there is a corrosion process that may affect any mobile part of the component and may prevent its natural movement. This will be checked via visual inspection of the surfaces' condition and acting consequently. The frequency of these check-ups is left up to maintenance's criterion; however, they must be more frequent in case the installation is in an especially corrosive environment.

Dynatech cannot be held responsible for any problem or accident arising from the non-compliance of the orders and recommendations mentioned both in these instructions and in the documents concerning the EC type examination certificates.

Please refer to the ASG safety gear series' manual for use and maintenance, for further information on the maintenance and installation of the safety gear.

8.1 STORAGE AND SERVICE LIFE

The overspeed governor must be stored in a cool, dry place. It must be protected from excessive light and never be exposed to the open air.

Storage temperature: 5 - 40°C.

Storage Humidity: 15 - 85% without condensation

Overspeed governor packages should be clean and dry so that they can be clearly identified.

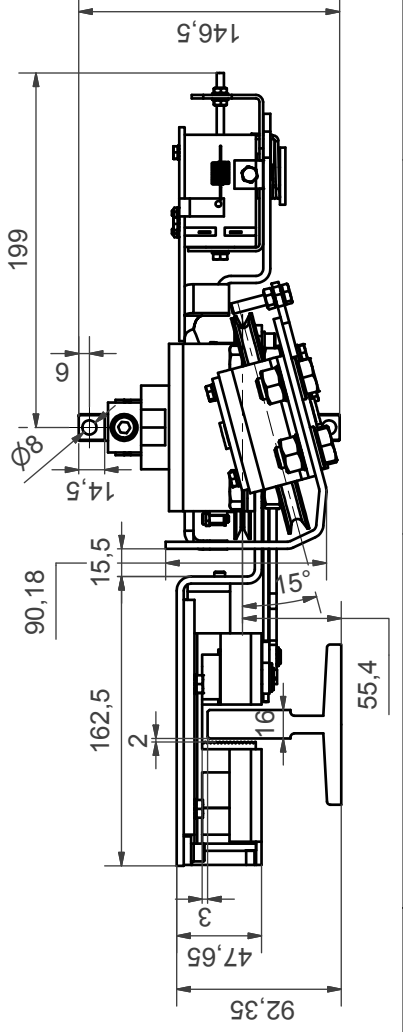
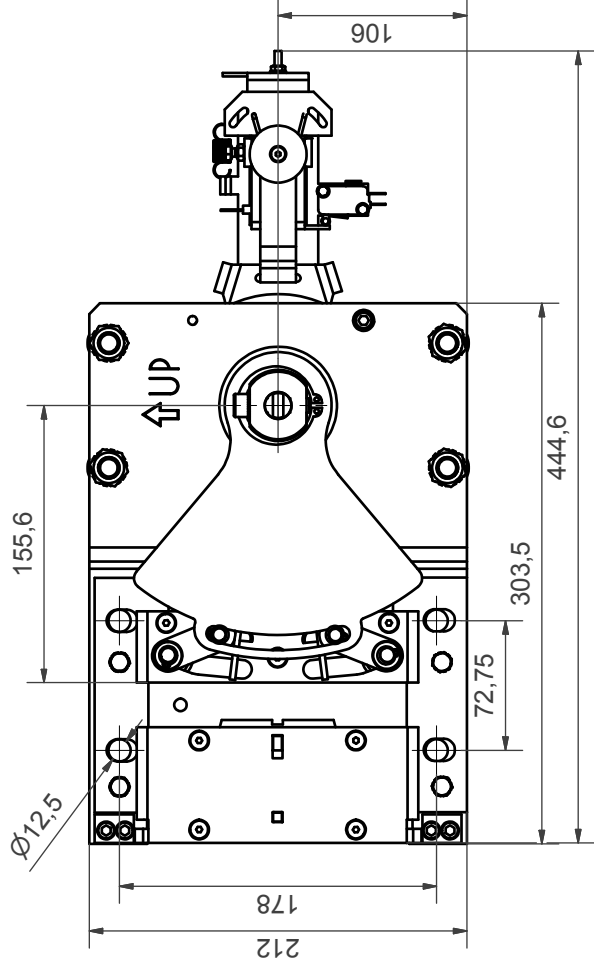
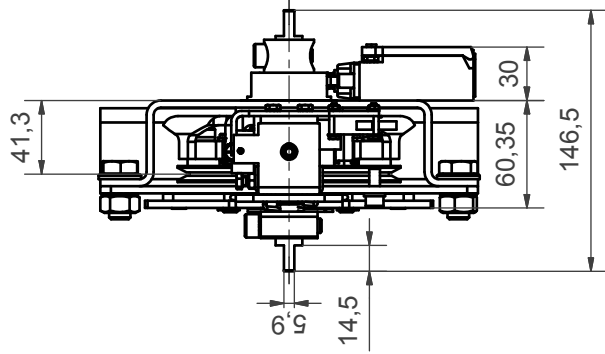
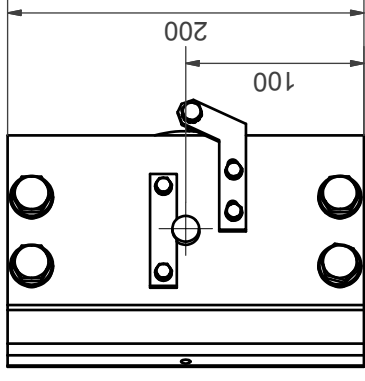
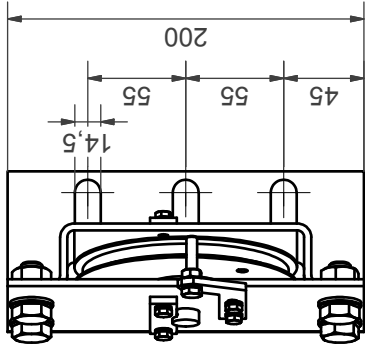
Constantly leaning an unbalanced load on packages, which may cause bending, or the accumulation of products stacked on top of each other is not allowed. When placing products or product packages on top of each other, the storage height should correspond to the packages' load and stability.

If the established criteria of this manual are observed, the overspeed governor's service life is set by the wear of his main pulley groove, which depends on the installation duty cycle. When estimating the element's service life, the effects of grease, dust or dirt due to the shaft's condition or to environmental conditions differing from those stated in this manual, were not taken into consideration.

9 INSTALLATION DRAWINGS.

The following drawings may be useful when adjusting and installing the Quasar-T25 overspeed governor:

- DYN 61.C001.01
- DYN 61.C002.01



		CONJUNTO: QUASAR T25 UD C (14-16)	
CANTIDAD POR CONJUNTO:		PLANOS DE INSTALACIÓN INSTALLATION DRAWINGS PLANS D'INSTALLATION EINBAUZEICHNUNGEN	
Material:		Escala:	
Peso terminado:		PLANO COD. N°: DYN 61.C002.01	
Tto. toco:		Sustituye a:	
Tto. sup:		2	
Dibujado		Sustituido por:	
Fecha		3	
26/02/2015			
Norma			
OBSERVACIONES:			
MEDIDAS SIN TOLERANCIA SEGÚN DIN-7168 GM			
Fichero:			