# EU Konformitätserklärung

**EU – Declaration of conformity / Déclaration de conformité UE / Dichiarazione di conformità UE**
**Declaración de conformidad de la UE / Declaração de conformidade da UE**


## Chr. Mayr GmbH + Co. KG
## Eichenstraße 1
## D-87665 Mauerstetten


| | | | |
|---|---|---|---|
| **DE** | erklärt folgende Konformität gemäß EU-Richtlinie und Normen für Artikel | **IT** | dichiara la seguente conformità secondo la direttiva UE e le norme per l'articolo |
| **EN** | explains the following conformity according to EU directives and norms for the following product | **ES** | declara la siguiente conformidad a tenor de la directiva y normas de la UE para el artículo |
| **FR** | déclare la conformité suivante selon la directive CE et les normes concernant l'article | **PT** | declara a seguinte conformidade, de acordo com as diretiva CE e normas para o artigo |

**Elektromagnetische Federdruckbremse /** Electromagnetic spring applied brakes / Freins électromagnétiques à ressort de pression / Freni elettromagnetici a molle compresse / Frenos de muelles electromagnéticos / Freio eletromagnético de molas

| **Produkt /** Product / Produit / Prodotto / Producto / Produto | **Größen** / Sizes / Tailles / Grandezze / Dimensión / Dimensão | **Typen** / *Types / Types / Serie / Tipos / Tipos* |
|---|---|---|
| **RSD®** | **6/7/8/ 6** | **894.5____ 894.6____** |

| | | | |
|---|---|---|---|
| | **2006/42/EG** | X | **2011/65/EU (RoHs II) incl. 2015/863/EU (RoHs III)** |
| X | **2014/35/EU** | X | **2014/33/EU** |
| X | **2014/30/EU** | | |

***Certification***
**Notified Body:** **Inspecta Tarkastus Oy**
P.O. Box 94 (Miestentie 3)
FI-02151 Espoo
**Reg. No.:** **0424**
**Certificate No.** **15656 / 15656-1**

***Monitoring of production*** ***(if deviates from the certifier)***
**Notified Body:** **© TÜV SÜD Industrie Service GmbH**
Westendstraße 199
D-80686 München
**Reg. No.:** **0036**

**Normen Referenz /** Standards reference / Référence normes / Riferimenti norme / Referencia normas / Referência padrões:

EN 81-20:2020-06 / EN 81-50:2020-06 / DIN EN IEC 63000:2019-05 / VDE 0580:2011-11

**Sicherheitsfunktion /** *Safety function* / Fonction de sécurité / *Funzione di sicurezza* / Función de seguridad / *Função de segurança*

| | |
|---|---|
| **DE** | **Bremseinrichtung, als Teil der Schutzeinrichtung für den aufwärtsfahrenden Fahrkorb gegen Übergeschwindigkeit und Bremselement gegen unbeabsichtigte Bewegung des Fahrkorbs.** |
| EN | Braking device as part of the protection device against over speed for the car moving in upwards direction and braking element against unintended car movement. |
| FR | Dispositif de freinage faisant partie d'un système de protection contre la survitesse en montée de la cabine d'ascenseur et élément de freinage contre le déplacement involontaire de la cabine d'ascenseur. |
| IT | Dispositivo di frenatura come parte del dispositivo di protezione contro la fuga verso l'alto della cabina e elemento di frenatura contro i movimenti incontrollati della cabina. |
| ES | Dispositivo de frenado como parte de un dispositivo de seguridad contra la sobrevelocidad de la cabina en movimiento ascendente y como elemento de frenado contra movimientos incontrolados de la cabina. |
| PT | Dispositivo de freio para ser usado como parte da unidade de proteção para prevenir excesso de velocidade da cabine elevadora em movimento ascendente e elemento de freio contra movimentos inadvertidos da cabine elevadora. |

Identification: **Jahr der Herstellung:** **Siehe Typenschild am Produkt** / *Year of manufacture:* *see product label*
*Année de production:* *Voir l'étiquette sur le produit* / *Anno di produzione:* *vedi l'etichetta sul prodotto*
*Año de fabricación:* *ver placa de identificación del produto* / *Ano de fabricação:* *Ver placa do produto*

**Dokumentationsbeauftragter** /documentation officer / Spécialiste documentation / ufficiale documentazione / oficial documentación / oficial documentação

Qualitätsmanagement

Mauerstetten, 14.12.2022
Ort und Datum / place and date / Lieu et date / luogo – data / fecha y lugar / Lugar e data

Geschäftsführer / Managing Director / Directeur Général / Gerente / Gerente
Ferdinand Mayr M.Sc.

**Certificate**
No. 15656

Inspecta

Inspecta Tarkastus Oy as Notified Body No. 0424 has granted this certificate as proof that the EU Type-Examination to

**Chr. Mayr GmbH + Co. KG**

**Eichenstraße 1**

**D-87665 Mauerstetten**

has been assessed in accordance with the requirements of the

**Directive 2014/33/EU**

**EN 81-1:1998+A3:2009 clauses 9.10 and 9.11, annexes F.7 and F.8**

**EN 81-20:2014 clauses 5.6.6 and 5.6.7**

**EN 81-50:2014 clauses 5.7 and 5.8**

Product EU type-examined

**Stopping devices to prevent uncontrolled car movements (UCM) and for Ascending car overspeed protection**

**Disk type brake ROBA diskstop:**
**type 894.5_._ size 6,7,8**
**type 894.6_._ size 6**

Manufactured by

| | | |
|---|---|---|
| **Chr. Mayr GmbH + Co. KG** | **Mayr Power Transmission Co., Ltd.** | **Mayr Polska sp.zo.o** |
| **Eichenstraße 1** | **7 Fuxin Road** | **Rojow, ul.Hetmanska 1** |
| **D-87665 Mauerstetten** | **Jiangsu Province, PR China** | **PL-63-500 Ostrzeszow** |
| | **215637 Zhangjiagang** | **Poland** |

Date of submission for EU type-examination: 07.12.2015

Certification is based on reports: 08495-01 - 08495-06 ; 15656-01

Documents annexed to this certificate: Appendix 1 and drawings E08806001000430, E08807000000330 and E08808000000430

Date of issue 2016-03-08
Valid from 2016-04-20

Jukka Vinnari
Lead Engineer

Notified Body Inspecta 0424

CEOC INTERNATIONAL

FI TESTATTUA TURVALLISUUTTA

FINAS Finnish Accreditation Service 1001 (EN ISO/IEC 17020) (Tyyppi A / Type A)

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Fax.+358 10 521 6211
**Group headquarters:** Inspecta Group Oy, Helsinki, Finland

**Appendix 1 to Certificate No. 15656**

Inspecta



**Type of safety device**: Two disk type brakes acting to machinery brake disk. The brake disk is attached to the traction sheave. The brakes are activated by an overspeed monitoring device.

The monitoring device of the overspeed is subject to EU type-examination according to directive 2014/33/EU (not part of this EU type-examination).

**Conditions:**

Disk brakes must be assembled and adjusted correctly according to manufacturer's instructions. Brake disk used for the disk type brake must fulfil following conditions:

- Material; steel or cast iron
- Friction surface quality: Ra 3,2 µm or better
- Axial run-out deviation: max 0,25 mm
- Brake disk width:

| Size | Disk width |
|---|---|
| 6/894.6, 6/894.5 | 10 - 15 mm |
| 7/894.5, 8/894.5 | 15 - 20 mm |

- Required brake torque can be calculated according to formula 1 in table 1 of appendix 1.

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| brake configuration - braking force - eff. friction diameter | | | |
|---|---|---|---|
| brake size/type | brake configuration | nominal braking force $F_{Br}$ | effective friction diameter |
| 6/894.6_ _._ _ | minimum force | 1724 N | $d_{eff}$ = d-0,04 |
| | maximum force | 2873 N | |
| 6/894.5_ _._ _ | minimum force | 1939 N | |
| | maximum force | 3232 N | |
| 7/894.5_ _._ _ | minimum force | 2180 N | $d_{eff}$ = d-0,05 |
| | maximum force | 3735 N | |
| 8/894.5_ _._ _ | minimum force | 2936 N | |
| | maximum force | 4895 N | |

d: brake disc diameter in [m]

nominal brake torque in [Nm]

$$M_{Br} = F_{Br} * d_{eff}/2$$ (formula 1)

maximum sliding speed referred to effective friction diameter (max. tripping speed)

**15 m/s**

nominal speed v in [m/s]

**12,0 m/s**

nominal speed of sheave n in [1/min]

$$n = (60 * v)/(\pi * d_{eff})$$

Cabin speed depends on roping transmission and diameter ratio of brake disc and grooves.

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Technical issues concerning nominal braking force, maximum tripping speed and response times for the one disk type brake are:

| | | | single brake from nominal voltage | | |
|---|---|---|---|---|---|
| | nominal braking force | maximum tripping speed | t0 | t50 | t90 |
| | | | ms | ms | ms |
| | N | m / s | max. | max. | max. |
| RSD 6/894.5__.__ | 1939 | 15 | 80 | 160 | 200 |
| RSD 6/894.5__.__ | 3232 | 15 | 40 | 100 | 150 |
| RSD 6/894.6__.__ | 1724 | 15 | 80 | 160 | 190 |
| RSD 6/894.6__.__ | 2873 | 15 | 40 | 85 | 115 |
| RSD 7/894.5__.__ | 2180 | 15 | 95 | 170 | 215 |
| RSD 7/894.5__.__ | 3735 | 15 | 45 | 100 | 135 |
| RSD 8/894.5__.__ | 2936 | 15 | 80 | 160 | 215 |
| RSD 8/894.5__.__ | 4895 | 15 | 40 | 95 | 160 |

t0: time from switching off power supply until start of brake torque rise
t50: time from switching off power supply until 50% of nominal brake torque
t90: time from switching off power supply until 90% of nominal brake torque

Response time of the brakes is the part of the overall delay time of the UCM protection system. The braking forces and response times of the brakes mentioned in this EU type examination certificate can be used as a part of the evaluation of the whole UCM protection system.

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Maximum tripping speed means brake disk gliding speed.

Nominal brake torque for a certain brake disk diameter can be calculated by the formula on table 1 of this appendix.

Always minimum 2 disk type brakes must be assembled to the brake disk to fulfil the requirement of redundancy.

**Monitoring of the brakes** shall be performed

a) by micro switches or proximity switches of both brakes connected to the lift control unit. Assembling of the switches is shown in following drawings : E08806001000430, E08807000000330, E08808000000430

or

b) by built-in brake monitoring system of the lift control unit to ensure at least correct lifting or dropping of the both brakes before every start or stop of the lift

or

c) by automatic built-in system of lift control unit defined by lift manufacturer to ensure the right braking force. This testing period shall be at least once in day.

Checking of the function of the brake monitoring system shall be verified during examinations and tests according EN 81-20 clause 6.3.

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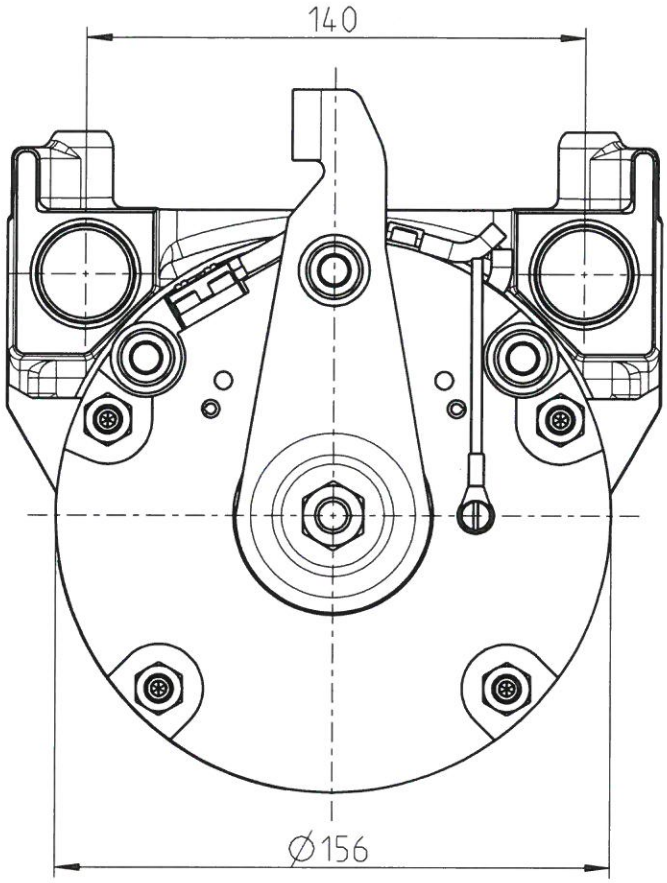
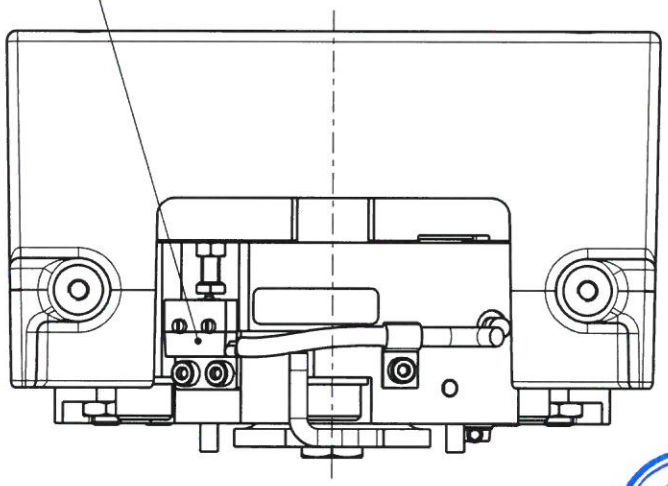



Lüftüberwachung /
release monitoring





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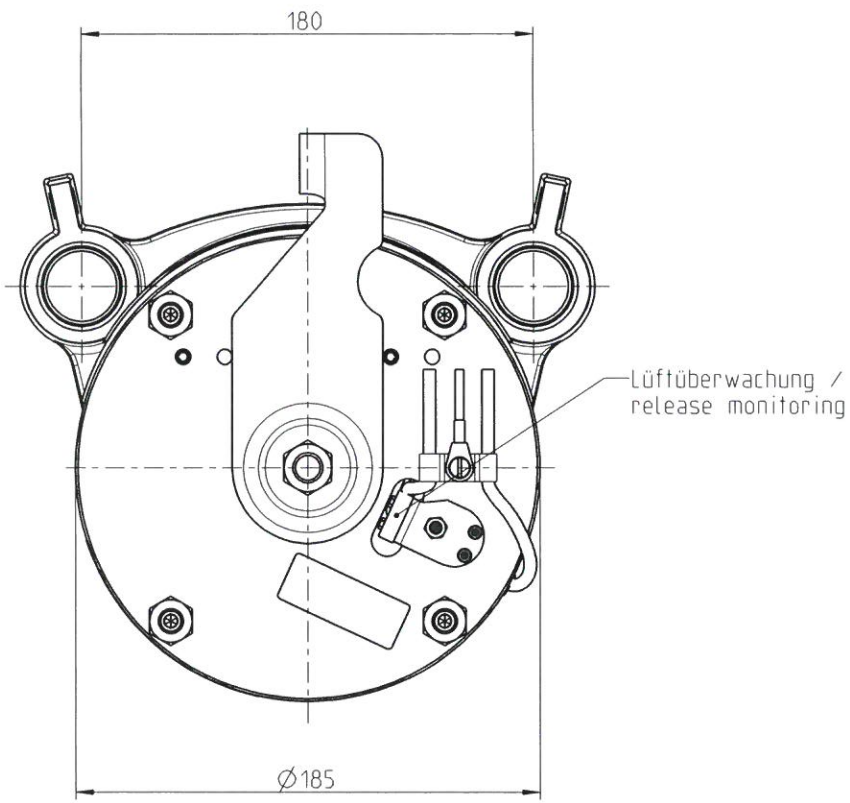
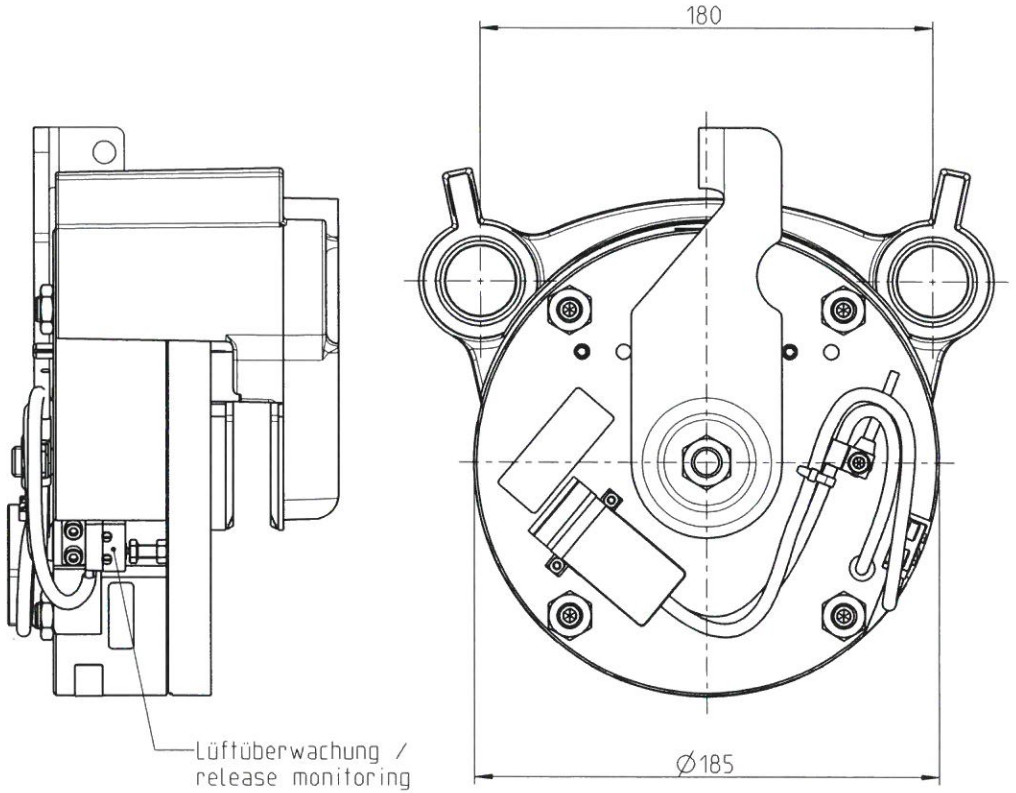
| | Datum / date: | Name / name: | Werkstoff-Nr./material-no.: | Schutzvermerk / protection notice DIN ISO 16016 | mayr® |
|---|---|---|---|---|---|
| Gezeichnet / drawn: | 20.08.2015 | Melzer | | | CHR. MAYR GMBH + CO.KG<br>Eichenstraße 1<br>87665 Mauerstetten<br>www.mayr.com |
| Geprüft / checked: | | | Werkstoff / material: | Toleriergrundsatz / fundamental tolerancing principle DIN EN ISO 8015:2011 | |
| Genehmigt / approved: | . | . | | | |
| Oberfläche / surface DIN EN ISO 1302 Ra = µm(✓) | Werkstückkanten / edges DIN ISO 13715 | | alternativ / alternative: | Allgem.-Toleranzen / general tolerance DIN ISO 2768-mH | |

| | | | | |
|---|---|---|---|---|
| Benennung / part name: ROBA-diskstop 894.- Size 6 | | | | Ersatz für / replacement for: |
| | | | | Artikelnummer / part number: |
| | | | | Dokumentnummer / document number: 4715148 |
| Maßstab / scale: | Type / type: | Größe / size: 6 | Gewicht / weight: kg | Zeichnungsnummer / drawing number: E08806001000430 |



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| | Datum / date: | Name / name: | Werkstoff-Nr./material-no.: | Schutzvermerk / protection notice DIN ISO 16016 | mayr® |
|---|---|---|---|---|---|
| Gezeichnet / drawn: | 20.08.2015 | Melzer | | | CHR. MAYR GMBH + CO.KG<br>Eichenstraße 1<br>87665 Mauerstetten<br>www.mayr.com |
| Geprüft / checked: | | | Werkstoff / material: | Toleranzgrundsatz / fundamental tolerancing principle DIN EN ISO 8015:2011 | |
| Genehmigt / approved: | - | - | alternativ / alternative: | Allgem.-Toleranzen / general tolerance DIN ISO 2768-mH | |
| Oberfläche / surface DIN EN ISO 1302 Ra = µm(√) | Werkstückkanten / edges DIN ISO 13715 | | | | |

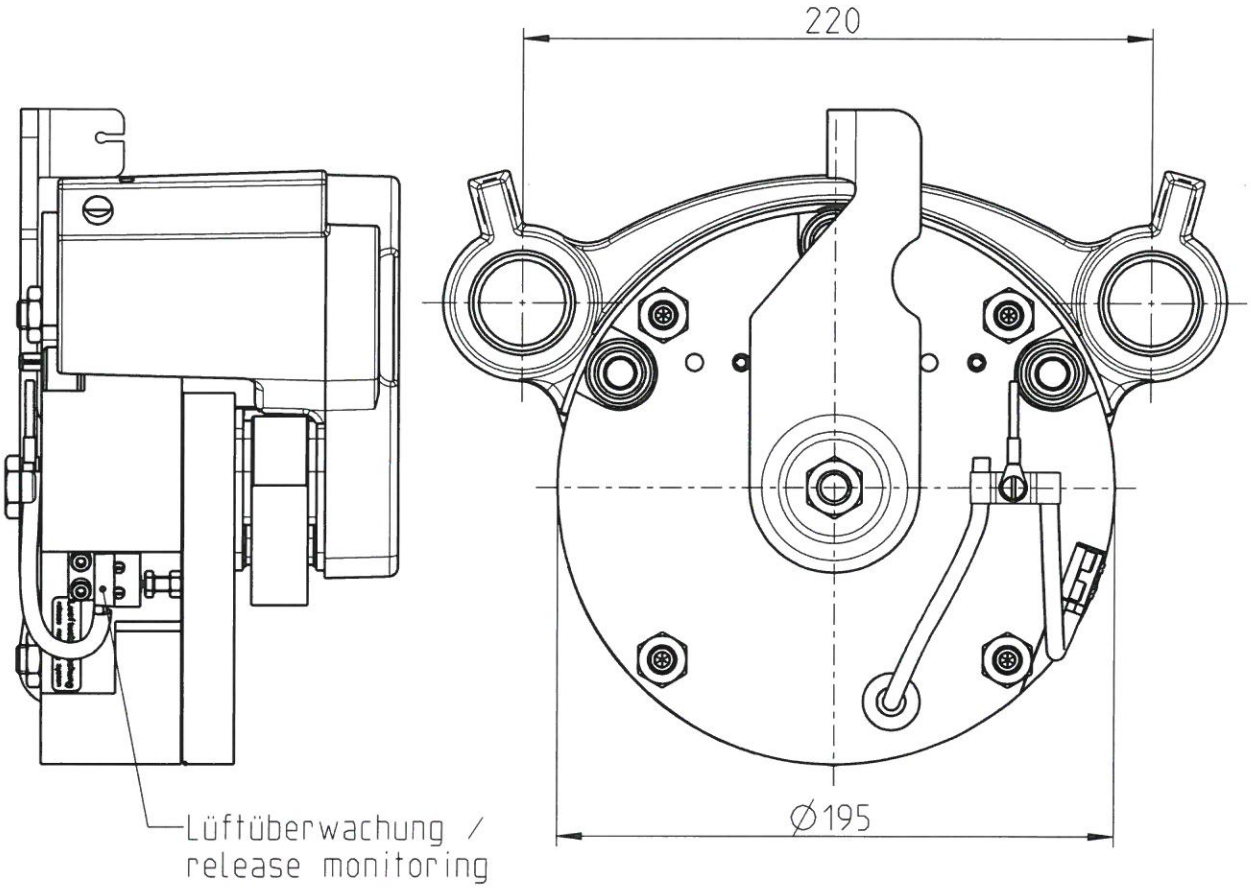
Benennung / part name:
ROBA-diskstop 894.-
Size 7

Ersatz für / replacement for:

Artikelnummer / part number:

Dokumentnummer / document number: 4715159

| Maßstab / scale: | Type / type: | Größe / size: | Gewicht / weight: | Zeichnungsnummer / drawing number: |
|---|---|---|---|---|
| | | 7 | kg | E088070000000330 |




Notified Body
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0424



| | Datum / date: | Name / name: | Werkstoff-Nr./material-no.: | Schutzvermerk / protection notice DIN ISO 16016 | mayr® |
|---|---|---|---|---|---|
| Gezeichnet / drawn: | 20.08.2015 | Melzer | | | |
| Geprüft / checked: | | | Werkstoff / material: | Tolerierungsgrundsatz / fundamental tolerancing principle DIN EN ISO 8015:2011 | CHR. MAYR GMBH + CO.KG<br>Eichenstraße 1<br>87665 Mauerstetten<br>www.mayr.com |
| Genehmigt / approved: | . | . | | | |
| Oberfläche / surface DIN EN ISO 1302<br>Ra = µm(✓) | Werkstückkanten / edges DIN ISO 13715 | | alternativ / alternative: | Allgem.-Toleranzen / general tolerance DIN ISO 2768-mH | |

| | |
|---|---|
| Benennung / part name: ROBA-diskstop 894.- Size 8 | Ersatz für / replacement for: |
| | Artikelnummer / part number: |
| | Dokumentnummer / document number: 4715156 |

| Maßstab / scale: | Type / type: | Größe / size: | Gewicht / weight: | Zeichnungsnummer / drawing number: |
|---|---|---|---|---|
| | | 8 | kg | E088080000430 |

## Only skilled and qualified personnel can operate:

**Do not deactivate the safety devices**.

1) Check that the landing doors are closed and blocked.
2) Switch off the mains switch.
3) Check that service brake is correctly closed and that no oil is present in the brake shoes.

**ATTENTION : RISK OF FALL OF THE CABIN**

4) Reassure **passengers** inside the cabin and inform them about the situation. **Avoid them from attempting to get out of the cabin before the cabin reaches the nearest floor**.
5) Refer to figure 2 and 3: screw the wrench to tighten the 4 Bowden cables connected to the Mayr brakes and open the 4 emergency calipers mechanically and simultaneously.
5) Refer to figure 2: screw the four threaded knobs (indicated by red arrow) to open the emergency brakes mechanically.
6) Hold the flywheel with one hand (Fig. 1 ref.1).
7) Release the service brake very carefully with the other hand (2) and observe the rotation direction of the traction sheave; if needed, just turn the flywheel in the direction the most suitable to move the cabin to the nearest floor.

**ATTENTION : CABIN CAN MOVE UPWARDS OR DOWNWARDS WITH REGARD TO THE LOAD!**

8) Keep releasing the service brake carefully (Fig. 1 ref. 2). To reduce at minimum acceleration and speed open and close the service brake intermittently

**ATTENTION: IMMEDIATELY RELEASE THE LEVER FOR BRAKE HAND RELEASE IN CASE OF SUDDEN AND BIG ACCELERATION**

9) Manually open the landing door where the cabin has been positioned, and let people coming out.

**ATTENTION: AVOID PASSENGERS FROM FALLING DOWN!**

**10) Check that all landing doors are closed and blocked**

**11) Mains switch must be switched off**

12- At machine start, unscrew the wrench (fig. 2) till the Bowden cables (fig.3) are untightened and the 4 Mayr calipers are completely closed.

**IN CASE YOU ARE NOT ABLE TO MOVE THE CABIN BY HAND, IMMEDIATELY INFORM THE SAFETY RESCUE SERVICE OF THE MAINTENANCE COMPANY.**

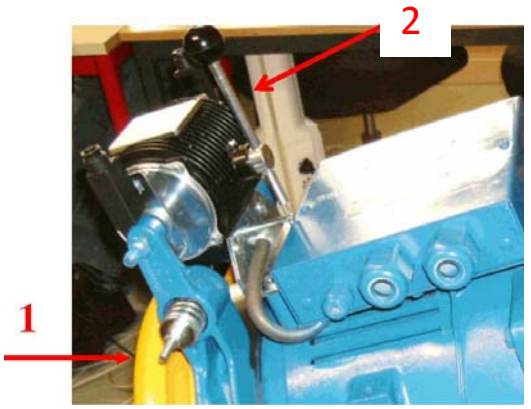


**Fig. 1**

Service brake

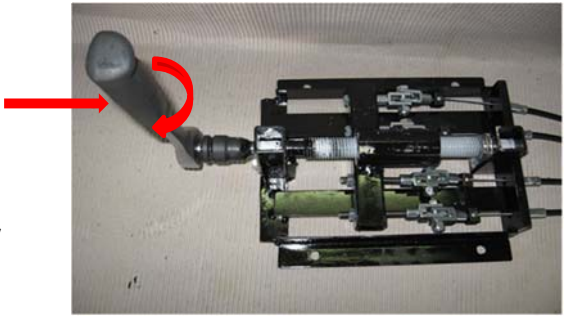

**Fig. 2**

Emergency brake: opening wrench key

**Fig. 3**

Bowden cables for opening n°4 Mayr calipers

## Only skilled and qualified personnel can operate:

**Do not deactivate the safety devices**.

1) Check that the landing doors are closed and blocked.
2) Switch off the mains switch.
3) Check that service brake is correctly closed and that no oil is present in the brake shoes.

**ATTENTION : RISK OF FALL OF THE CABIN**

4) Reassure **passengers** inside the cabin and inform them about the situation. **Avoid them from attempting to get out of the cabin before the cabin reaches the nearest floor**.
5) Refer to figure 2: screw the four threaded knobs (indicated by red arrow) to open the emergency brakes mechanically.
6) Hold the flywheel with one hand (Fig. 1 ref.1).
7) Release the service brake very carefully with the other hand (2) and observe the rotation direction of the traction sheave; if needed, just turn the flywheel in the direction the most suitable to move the cabin to the nearest floor.

**ATTENTION : CABIN CAN MOVE UPWARDS OR DOWNWARDS WITH REGARD TO THE LOAD!**

8) Keep releasing the service brake carefully (Fig. 1 ref. 2). To reduce at minimum acceleration and speed open and close the service brake intermittently

**ATTENTION: IMMEDIATELY RELEASE THE LEVER FOR BRAKE HAND RELEASE IN CASE OF SUDDEN AND BIG ACCELERATION**

9) Manually open the landing door where the cabin has been positioned, and let people coming out.

**ATTENTION: AVOID PASSENGERS FROM FALLING DOWN!**
**10) Check that all landing doors are closed and blocked**
**11) Mains switch must be switched off**

**IMMEDIATELY INFORM SAFETY RESCUE SERVICE OF THE MAINTENANCE COMPANY**

12- At machine start, unscrew the four threaded knobs (fig. 2) till the brakes are completely closed.

**IN CASE YOU ARE NOT ABLE TO MOVE THE CABIN BY HAND, IMMEDIATELY INFORM THE SAFETY RESCUE SERVICE OF THE MAINTENANCE COMPANY.**

**Fig. 1**

Service brake

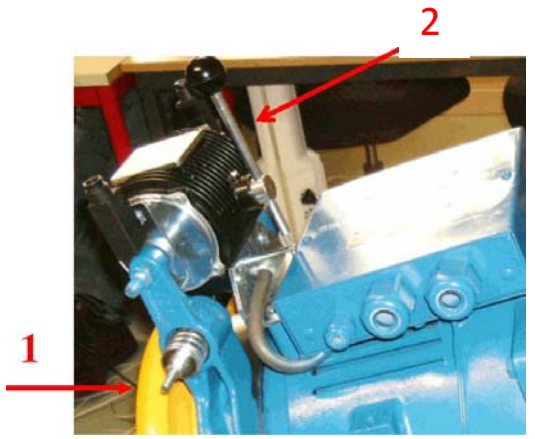


**Fig. 2**

Emergency brake