

ECE TYPE-APPROVAL CERTIFICATE



Communication concerning:² ~~Approval granted~~
~~Approval extended~~
~~Approval refused~~
~~Approval withdrawn~~
~~Production definitively discontinued~~

Of a vehicle type with regard to braking, pursuant to Regulation No. 13

Approval No: **E24*13R10/05*0103*01**

Reason(s) for extension:

- *Modification of maximum speed of the vehicle from 90km/h to 100km/h.*
- *Modification of the minimum mass of the completed vehicle.*
- *Addition of series of tests B*

- | | | |
|--------|---|---|
| 1. | Trade name or make of the vehicle: | <i>Iveco / System Truck</i> |
| 2. | Vehicle category: | <i>N3</i> |
| 3. | Vehicle type: | <i>ST ML225E 13R</i> |
| 4. | Manufacturer's name and address: | <i>S.T. System Truck S.p.A.
Via Paesa, 28
IT-46048 Roverbella (MN)</i> |
| 5. | If applicable name and address of manufacturer's authorised representative: | <i>N/A</i> |
| 6. | Mass of the vehicle: | |
| 6.1. | Maximum mass of the vehicle: | <i>22500 kg</i> |
| 6.2. | Minimum mass of the vehicle: | <i>6950 kg</i> |
| 7. | Distribution of mass on each axle (maximum value): | <i>See information folder for details</i> |
| 8. | Make and type of brake linings, discs and drums: | <i>See information folder for details</i> |
| 8.1. | Brake linings | |
| 8.1.1. | Brake linings tested to all relevant prescriptions of Annex 4: | <i>Yes</i> |

Approval No: **E24*13R10/05*0103*01**

8.1.2.	Alternative brake linings tested in Annex 15:	N/A
8.2.	Brake discs and drums	
8.2.1.	Identification code of brake discs covered by the braking system approval:	<i>See information folder for details</i>
8.2.2.	Identification code of brake drums covered by the braking system approval:	<i>See information folder for details</i>
9.	In the case of a power driven vehicle	
9.1.	Engine type:	<i>See information folder annex 3 for details</i>
9.2.	Number and ratios of gears:	<i>See information folder annex 4 for details</i>
9.3.	Final drive ratio:	<i>See information folder annex 4 for details</i>
9.4.	If applicable, maximum mass of trailer which may be coupled:	
9.4.1.	Full trailer:	<i>See information folder annex 2 for details</i>
9.4.2.	Semi-trailer:	N/A
9.4.3.	Centre-axle trailer (indicate also the maximum ratio of the coupling overhang to the wheelbase):	<i>See information folder annex 1 for details</i>
9.4.4.	Unbraked trailer:	750
9.4.5.	Maximum mass of the combination:	<i>See information folder annex 2 for details</i>
10.	Tyre dimensions:	<i>See information folder annex 5 for details</i>
10.1.	Temporary-use spare wheel/tyre dimensions:	N/A
10.2.	Vehicle meets the technical requirements of Annex 3 to Regulation No. 64 (yes/no):	No.
11.	Number and arrangement of axles:	3 axles
12.	Brief description of braking equipment:	<i>See information folder for details</i>
13.	Mass of vehicle when tested:	<i>Mass in running order and Technically Permissible maximum laden mass, See test report IT20/1244 Up to -01 for details</i>

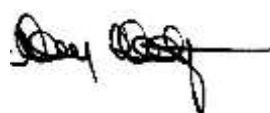
Approval No: **E24*13R10/05*0103*01**

14.	Results of the tests and vehicle characteristics:	<i>See test report IT20/1244 Up to -01 and manufacturer's information document for details.</i>
14.6.	Braking system(s) used during the Type-II/IIA test:	<i>Engine brake integrated with retarder</i>
14.7.	Reaction time and dimensions of flexible pipes:	
14.7.1.	Reaction time at the brake actuator:	<i>See information folder for details</i>
14.7.2.	Reaction time at the control line coupling head:	<i>See information folder for details</i>
14.7.3.	Flexible pipes of tractors for semi-trailers: Reservoir – modulator: internal diameter (mm): Modulator – brake chambers internal diameter (mm):	<i>See information folder for details</i>
14.8.	Information required under paragraph 7.3. of annex 10 to this Regulation:	<i>N/A</i>
14.9.	Vehicle is /is not equipped to tow a trailer with electrical braking systems:	<i>Is not</i>
14.10.	Vehicle is/is not equipped with an anti-lock system:	<i>Is</i>
14.10.1.	Category of anti-lock system:	<i>Category 1/2/3 Category A/B</i>
14.10.2.	The vehicle fulfils the requirements of annex 13:	<i>Yes</i>
14.10.3.	Vehicle is/is not equipped to tow trailers equipped with anti-lock systems:	<i>Is</i>
14.10.4.	Where an annex 19 test report has been utilised, the test report number(s) shall be stated:	<i>N/A</i>
14.11.	The vehicle is subject to the requirements of annex 5 (ADR):	<i>Yes</i>
14.11.1.	The vehicle fulfils the endurance braking performance requirements according to the Type-IIA test up to a total maximum mass of tonnes:	<i>N/A</i>
14.11.2.	The power driven vehicle is fitted with a control device for the endurance braking system on the trailer:	<i>N/A</i>
14.11.3.	In the case of trailers, the vehicle is equipped with an endurance braking system:	<i>No</i>

Approval No: **E24*13R10/05*0103*01**

14.12.	Vehicle is equipped with a control line(s) according to paragraphs 5.1.3.1.1/5.1.3.1.2/5.1.3.1.3:	5.1.3.1.2
14.13.	Adequate documentation according to annex 18 was supplied in respect of the following systems:	Yes
14.14.	The vehicle is equipped with a vehicle stability function:	No
	If yes:	
	The vehicle stability function has been tested according to and fulfils the requirements of Annex 21:	No
	Vehicle stability function is optional equipment:	No
	Vehicle stability function includes directional control:	No
	Vehicle stability function includes roll-over control:	No
14.14.1.	Where an Annex 19 test report has been utilised, the test report number shall be stated:	N/A
14.15.	The vehicle is equipped with an automated connector: yes/no ² :	N/A
14.15.1.	If yes, does the automated connector fulfil the requirements of Annex 22: yes/no ² :	N/A
14.15.2.	The automated connector is of category A/B/C/D2"	N/A
15.	Additional information for use with the annex 20 alternative type approval procedure:	N/A
15.1.	Description of suspension:	N/A
15.1.1.	Manufacturer:	N/A
15.1.2.	Make:	N/A
15.1.3.	Type:	N/A
15.1.4.	Model:	N/A
15.2.	Wheelbase of vehicle tested:	N/A
15.3.	Actuation differential (if any) within axle group:	N/A
16.	Trailer approved utilising annex 20 procedure: (If yes, appendix 2 to annex 2 shall be completed)	N/A

Approval No: E24*13R10/05*0103*01

17. Vehicle submitted for approval on: ***As before and 17.11.2020***
18. Technical service responsible for conducting approval tests: ***FAKT S.r.l.,
Via Lithos, 53,
IT-25086 Rezzato (BS),
Italy.***
19. Date of report issued by that service: ***As before and 02.11.2020***
20. Number of report issued by that service: ***IT20/1244 Up to -01***
21. Approval ~~granted/refused/extended/withdrawn~~: ***Extended.***
22. Position of approval mark on the vehicle: ***Adhesive plate on the front wall behind
radiator grill near manufacturer's
plate (stage 2)***
23. Place: ***Dublin.***
24. Date: ***25th November, 2020***
25. Signature: 
26. The summary referred to in paragraph 4.3. of this Regulation is annexed to this communication.



**/ At the request of (an) applicant(s) for Regulation No. 90 approval, the information shall be provided by the Type Approval Authority as contained in Appendix 1 to this annex. However, this information shall not be provided for purposes other than Regulation No. 90 approvals.*

Approval No: **E24*13R10/05*0103*01**

Index to the Information Package

Date of issue:	23rd September, 2020
Date of latest amendment:	25th November, 2020
Reason for extension/revision:	- <i>Modification of maximum speed of the vehicle from 90km/h to 100km/h.</i> - <i>Modification of the minimum mass of the completed vehicle.</i> - <i>Addition of series of tests B</i>
1. Additional conditions, and advisory notes on legal alternatives.	
2. Test report(s)	
- numbers(s):	IT20/1244 Up to -01
- date of issue:	25.08.2020
- date of latest amendment:	02.11.2020
3. Information document	
- number(s):	ST_ML225E_13R Up to _01
- date of issue:	20.07.2020
- date of latest amendment:	27.10.2020
Documentation:	45 pages



Approval No: E24*13R10/05*0103*01

Appendix: **Additional conditions, and advisory notes on legal alternatives**

A: Additional conditions:

1. The attached technical report, with any of its attachments, forms part of this Type Approval certificate.
2. Each type from series production shall be to the measurements specified in the attached drawings, and shall be manufactured only from the materials specified in the Approval documents.
3. Changes in the type are permitted only with the explicit permission of NSAI. Breaches of this requirement will lead to a withdrawal of the Type Approval, and in addition may be subject to criminal prosecution.
4. At regular intervals, any tests or associated checks prescribed by the applicable legislation to verify continued conformity with the approved type shall be carried out. The manufacturer shall demonstrate compliance with this by submitting to NSAI evidence of adequate arrangements and documented control plans for each type approved.
5. Any set of samples or test pieces showing evidence of non-conformity shall give rise to further sampling and testing and all steps shall be taken to restore conformity of production.
6. This Type Approval will expire when it is surrendered by the holder, or withdrawn by NSAI, or when the approved type no longer conforms to legal requirements. The recall of the Type Approval can be issued by NSAI when the conditions required for the issuing or continuation of the Type Approval are no longer current, or when the Approval holder is in breach of the duties attached to the Type Approval, or when it is established that the approved type no longer meets the requirements of traffic safety.
7. Changes in the company name, address or manufacturing site, as well as in any of the sales or other agents specified in the issuing of the approval must immediately be notified to NSAI.
8. The duties imposed by the issuing of this certificate are not transferable. The legal protection of third parties is not affected by this certificate.
9. When the manufacture or sale of the system, component or separate technical unit has not been started within one year of the date of issue of this certificate, then NSAI is to be informed. This requirement also applies when the manufacture or sale has been halted for more than one year, or when it ought to have been halted for more than one year. The initial commencement of manufacture or sale, or the resumption of manufacture or sale, shall then be notified to NSAI within one month of commencement or resumption.

B: Legal Options:

Any objection to the requirements set out in this certificate shall be made within one month of the date of issue. The objection shall be made, in writing, to NSAI in Dublin.

Test Report No.: IT20/1244 - 01
UNECE R13-10

Typ: ST ML225E 13R

Hersteller: S.T. System Truck S.p.A.
IT-46048 Roverbella (MN)



Test Report

No. IT20/1244 Vers. 01

Agreement concerning the Adoption of Harmonized Technical United Nations Regulations for Wheeled Vehicles, Equipment and Parts which can be Fitted and/or be Used on Wheeled Vehicles and the Conditions for Reciprocal Recognition of Approvals Granted on the Basis of these United Nations Regulations (Revision 3)

Uniform provisions concerning the approval of vehicles of categories M, N and O with regard to braking

UN-R13

of **01.06.1970**

as last amended by

series of amendments 10 – Supplement 5

of **15.10.2008**

Approval status

☐	Granting of a type approval No.
☒	Extension to type approval no. E24*13R10/05*0103*00
☐	Correction to type approval no.
☐	Documentation of test results

Structure of the Test Report:

- 0 : General
- 1 : Test vehicle(s)/-object(s)
- 2 : Test record
- 3 : Enclosures
- 4 : Statement of conformity

Duplication and publishing in extracts of the Test Report is allowed only by written permission of the Test Laboratory.

Test Report No.: IT20/1244 - 01
UNECE R13-10

Typ: ST ML225E 13R

Hersteller: S.T. System Truck S.p.A.
IT-46048 Roverbella (MN)



0 General

- 0.1 Make : Iveco / System Truck
- 0.2 Type : ST ML225E 13R
- 0.2.1 Variant(s)/version(s) : See information document - Annex 0.0 and 0.1
- 0.2.2 Commercial name(s) : See information document point 0.2.1.
- 0.3 Category of vehicle : N3
- 0.4 Name and address of the manufacturer : S.T. System Truck S.p.A.
Via Paesa, 28
IT-46048 Roverbella (MN)
- 0.4.1 For multi-stage approved vehicles, company name and address of the manufacturer of the base/previous stage(s) vehicle: : Iveco S.p.A.
IT-10156 Torino - via Puglia, 35
- 0.5 Information folder :
Information document
- No : ST_ML225E_13R-01
- Date of issue : 20.07.2020
- Date of last change : 27.10.2020
- 0.6 List of modifications : – Modification of maximum speed of the vehicle from 90km/h to 100km/h;
– Modification of the minimum mass of the completed vehicle;
– Addition of series of tests B

Test Report No.: IT20/1244 - 01
UNECE R13-10

Typ: ST ML225E 13R

Hersteller: S.T. System Truck S.p.A.
IT-46048 Roverbella (MN)



1 Test vehicle(s)/ - object(s):

Series of tests A

- 1.1 Description: : representative vehicle
- 1.1.1 Variant: : ICDR115W
Version: : 2TS10ADABP2
VIN (Stage 1): : ZCFA81MM702705763
- 1.1.2 Gear box type: : ALLISON 3000
No. of gears: : 6
- 1.1.3 Number and arrangement of axles: : 3; 1st steering / non powered axle
2nd non steering / powered axle
3rd non steering / non powered axle
- 1.1.4 Wheelbase(s): : 1-2: 5850 mm
2-3: 1395 mm
- 1.1.5 Tyres
1st axle: : 305/70 R19,5 (single)
2nd axle: : 305/70 R19,5 (twin)
3rd axle: : 305/70 R19,5 (twin)
- 1.1.6 Kind of suspension: : 1st mechanical
2nd pneumatic
3rd pneumatic
- 1.1.7 Engine
Manufacturer: : FPT Industrial S.p.A.
Type: : F4AFE611K*N

1.1.8 Brakes

Type and characteristics of the brakes:	: Compressed air brake system with separate circuits for the front, rear, parking and auxiliary equipment, electronically and/or pneumatically controlled.
Brake lining:	: 1 st axle: Make: Ferodo - Type: 4550 2 nd axle: Make: Ferodo - Type: 4550 3 rd axle: Make: Ferodo - Type: 4550 asbestos free
Wheel brake:	: 1 st axle: brake disk Ø377 mm 2 nd axle: brake disk Ø377 mm 3 rd axle: brake disk Ø377 mm
Brake Chamber:	: 1 st axle: 22" 2 nd axle: 18/27" 3 rd axle: 18/27"
Anti-lock braking system:	: Category 1
Service braking system:	: Foot operated, air brake with mechanical control. Two circuit: 1 st for axle 1, 2 nd for axles 2 and 3.
Secondary braking system:	: 2 nd circuit of the service braking system
Parking braking system:	: Spring brake, manual control, mechanical actuated on axles 2 and 3

	unladen	laden
1.1.9 Mass of vehicle during test(s)	6950 kg	24000 kg
Height of center of gravity:	880 mm	1450 mm
1.1.10 Maximum speed:	90 km/h	

Series of tests B

- 1.1 Description: : representative vehicle
- 1.1.1 Variant: : ICDR115W
Version: : 2TS10ADABP2
VIN (Stage 1): : ZCFA81MM702705763
- 1.1.2 Gear box type: : ALLISON 3000
No. of gears: : 6
- 1.1.3 Number and arrangement of axles: : 3; 1st steering / non powered axle
2nd non steering / powered axle
3rd non steering / non powered axle
- 1.1.4 Wheelbase(s): : 1-2: 5850 mm
2-3: 1395 mm
- 1.1.5 Tyres
1st axle: : 305/70 R19,5 (single)
2nd axle: : 305/70 R19,5 (twin)
3rd axle: : 305/70 R19,5 (twin)
- 1.1.6 Kind of suspension: : 1st mechanical
2nd pneumatic
3rd pneumatic
- 1.1.7 Engine
Manufacturer: : FPT Industrial S.p.A.
Type: : F4AFE611K*N

1.1.8 Brakes

Type and characteristics of the brakes:	: Compressed air brake system with separate circuits for the front, rear, parking and auxiliary equipment, electronically and/or pneumatically controlled.
Brake lining:	: 1 st axle: Make: Ferodo - Type: 4550 2 nd axle: Make: Ferodo - Type: 4550 3 rd axle: Make: Ferodo - Type: 4550 asbestos free
Wheel brake:	: 1 st axle: brake disk Ø377 mm 2 nd axle: brake disk Ø377 mm 3 rd axle: brake disk Ø377 mm
Brake Chamber:	: 1 st axle: 22" 2 nd axle: 18/27" 3 rd axle: 18/27"
Anti-lock braking system:	: Category 1
Service braking system:	: Foot operated, air brake with mechanical control. Two circuit: 1 st for axle 1, 2 nd for axles 2 and 3.
Secondary braking system:	: 2 nd circuit of the service braking system
Parking braking system:	: Spring brake, manual control, mechanical actuated on axles 2 and 3

	unladen	laden
1.1.9 Mass of vehicle during test(s)	6900 kg	24050 kg
Height of center of gravity:	880 mm	1455 mm
1.1.10 Maximum speed:	100 km/h	

Test Report No.: IT20/1244 - 01
UNECE R13-10

Typ: ST ML225E 13R

Hersteller: S.T. System Truck S.p.A.
IT-46048 Roverbella (MN)



- 2 Test record
- 2.1 Place of test : series of tests A: IT-Balocco (VC)
series of tests B: IT-Roverbella (MN)
- Date of test : series of tests A: 30.07.2020
series of tests B: 02.11.2020
- 2.2 Parameter of the test area
- Test track : series of tests A:
Asphalt & concrete dry, ceramic tiles wet
series of tests B:
Asphalt & concrete dry
- Air temperature : series of tests A: 29 °C
series of tests A: 13 °C
- Velocity of wind : series of tests A: <2,5 m/s
series of tests A: <2,5 m/s
- 2.3 Equipment for measuring and testing : The equipment on which the tests were carried out, fulfilled the requirements of the above-mentioned Regulation.

2.4 Test results

Series of tests A

2.4.1 Test type 0:

Unladen Engine disconnected	Test speed [km/h]	Braking performance [m/s ²]	Force applied to the control [N]
Service brake	60	5.2	480
Axle 1	40	4.6	480
Axle 2+3	40	2.7 (*)	120
Service brake (@3bar)	40	2.6	350

No abnormal vibration, vehicle keeps lane
 (*): using the parking brake system (hand lever command)

Laden Engine disconnected	Test speed [km/h]	Braking performance [m/s ²]	Force applied to the control [N]
Service brake	60	6,9	650
Axle 1	40	2.4	450
Axle 2+3	40	3.7	480
Service brake (@3bar)	40	3.0	580

No abnormal vibration, vehicle keeps lane

Unladen Engine connected	Test speed [km/h]	Braking performance [m/s ²]	Force applied to the control [N]
	27	5.2	350
	35	5.2	380
	72	5.9	420

No abnormal vibration, vehicle keeps lane

Laden Engine connected	Test speed [km/h]	Braking performance [m/s ²]	Force applied to the control [N]
	27	6.0	600
	35	6.2	640
	72	5.5	630

No abnormal vibration, vehicle keeps lane

2.4.3 Test type I:

Conditions during the heating : duration of a braking cycle: 60s
 No. of brake cycles: 20
 Initial speed V1: 60km/h
 Final speed V2: 30km/h
 deceleration dm: 3m/s²

Laden	Test speed [km/h]	Braking performance [m/s ²]	Force applied to the control [N]
Service brake (heated)	60	4.8	450

No abnormal vibration, vehicle keeps lane

2.4.4 Test type II

Equivalent test on track : 0.8 m/s²
 Braking system(s) used : Engine brake integrated with retarder

2.4.5 Test type IIA

Equivalent test on track : 0.8 m/s²
 Braking system(s) used : Engine brake integrated with retarder

2.4.6 Parking brake : fulfilled

2.4.7 Reaction time : 0,6 ≤ 0,6s

2.4.8 Dimensions of flexible pipes : fulfilled
 (refer to drawing no. 25.01.05.0076)

2.4.9 Charging time of air reservoirs : fulfilled

2.4.10 Spring brake according to Annex 8 : fulfilled

2.4.11 Compatibility between tractor and trailer : fulfilled

2.4.12 ABS according to Annex 13

General requirements : fulfilled

2.4.13 ABS - Energy consumption : Braking performance @ 40km/h at the 5th full brake with brakes reservoirs isolated: 5.5 m/s²

2.4.14 ABS - Utilization of adhesion :	k_a [$\geq 0,5$]	k_b [$\leq 0,3$]	k_a/k_b [$\geq 2,0$]
Laden:	0.51	0.18	2.8
Unladen:	0.70	0.20	3.5

	Low grip surface	High grip surface
	ϵ [$\geq 0,75$]	ϵ [$\geq 0,75$]
Laden:	0.97	0.81
Unladen:	0.96	0.87

2.4.15 ABS - Additional checks : fulfilled

2.4.16 ABS - Residual braking performance in event of failure within the electric control transmission :

	Test speed [km/h]	Braking performance [m/s ²]	Force applied to the control [N]
Laden:	40	2.14	485
Unladen:	40	4.31	420

2.4.17 The vehicle fulfils the requirements of Annex 13 : yes

2.4.18 Vehicle equipped to tow trailers equipped with anti-lock systems : yes

2.4.19 The vehicle is subject to the requirements of Annex 5 (ADR) : yes

2.4.20 Vehicle is equipped with a control line(s) according to : paragraphs ~~5.1.3.1.1.~~ / 5.1.3.1.2. / ~~5.1.3.1.3.~~

Series of tests B

2.4.1 Test type 0:

Unladen (Engine disconnected) : Not repeated as modification not influencing the obtained tests results

Laden (Engine disconnected) : Not repeated as modification not influencing the obtained tests results

Unladen Engine connected	Test speed	Braking performance	Force applied to the control
	[km/h]	[m/s ²]	[N]
	30	6.2	400
	80	6.9	520

No abnormal vibration, vehicle keeps lane

Laden Engine connected	Test speed	Braking performance	Force applied to the control
	[km/h]	[m/s ²]	[N]
	30	7.2	440
	80	6.1	640

No abnormal vibration, vehicle keeps lane

2.4.3 Test type I: : Not repeated as modification not influencing the obtained tests results

2.4.4 Test type II : Not repeated as modification not influencing the obtained tests results

2.4.5 Test type IIA : Not repeated as modification not influencing the obtained tests results

2.4.6 Parking brake : Not repeated as modification not influencing the obtained tests results

2.4.7 Reaction time : Not repeated as modification not influencing the obtained tests results

2.4.8 Dimensions of flexible pipes : Not repeated as modification not influencing the obtained tests results

- | | | |
|--------|---|---|
| 2.4.9 | Charging time of air reservoirs | : Not repeated as modification not influencing the obtained tests results |
| 2.4.10 | Spring brake according to Annex 8 | : Not repeated as modification not influencing the obtained tests results |
| 2.4.11 | Compatibility between tractor and trailer | : Not repeated as modification not influencing the obtained tests results |
| 2.4.12 | ABS according to Annex 13 | : Not repeated as modification not influencing the obtained tests results |
| 2.4.13 | ABS - Energy consumption | : Not repeated as modification not influencing the obtained tests results |
| 2.4.14 | ABS - Utilization of adhesion | : Not repeated as modification not influencing the obtained tests results |
| 2.4.15 | ABS - Additional checks | : Not repeated as modification not influencing the obtained tests results |
| 2.4.16 | ABS - Residual braking performance in event of failure within the electric control transmission | : Not repeated as modification not influencing the obtained tests results |
| 2.4.17 | The vehicle fulfils the requirements of Annex 13 | : Not repeated as modification not influencing the obtained tests results |
| 2.4.18 | Vehicle equipped to tow trailers equipped with anti-lock systems | : Not repeated as modification not influencing the obtained tests results |
| 2.4.19 | The vehicle is subject to the requirements of Annex 5 (ADR) | : Not repeated as modification not influencing the obtained tests results |
| 2.4.20 | Vehicle is equipped with a control line(s) according to | : Not repeated as modification not influencing the obtained tests results |



SCHEDA INFORMATIVA INFORMATION DOCUMENT

N° **ST_ML225E_13R_01**
No.
del **27.10.2020**
of

INDICE INDEX

Pagina / page :

	MOTIVI DELL'ESTENSIONE - RIEPILOGO <i>REASONS FOR EXTENSION - HISTORY</i>	2
0.	DATI GENERALI <i>GENERAL</i>	2
1.	CARATTERISTICHE COSTRUTTIVE GENERALI DEL VEICOLO <i>GENERAL CONSTRUCTION CHARACTERISTICS OF THE VEHICLE</i>	2
2.	MASSE E DIMENSIONI <i>MASSES AND DIMENSIONS</i>	3
3.	CONVERTITORE DELL'ENERGIA DI PROPULSIONE <i>PROPULSION ENERGY CONVERTER</i>	5
4.	TRASMISSIONE <i>TRANSMISSION</i>	6
5.	ASSI <i>AXLES</i>	6
6.	SOSPENSIONE <i>SUSPENSION</i>	6
8.	FRENI <i>BRAKES</i>	8
	CHIAVE INTERPRETAZIONE VARIANTI E VERSIONI <i>VARIANTS AND VERSIONS EXPLANATION KEY</i>	All. 0.0
	COMBINAZIONI POSSIBILI <i>PERMISSIBLE COMBINATION</i>	All. 0.1
	ALLEGATI <i>ATTACHMENTS</i>	
DISEGNI <i>DRAWINGS</i>	disegno complessivo: <i>overall drawing:</i>	55.01.00.0132 del 03.07.2020 rev. 0 of
	disegno asse aggiunto: <i>added axle drawing:</i>	S08F111960 del 28.08.2014 rev. 0 of
	disegno sospensione asse aggiunto: <i>added axle suspension drawing:</i>	10.01.10.0009 del 28.08.2014 rev. 0 of
	disegno molla pneumatico asse aggiunto: <i>added axle air-bag drawing:</i>	98490464 del 26.08.2014 rev. 0 of
	disegno ammortizzatore asse aggiunto: <i>added axle shock absorber drawing:</i>	504147623 del 26.08.2014 rev. 0 of
	schema impianto frenante: <i>braking layout:</i>	25.01.05.0076 del 01.07.2020 rev. 0 of
	schema impianto frenante: <i>braking layout:</i>	25.01.05.0031 del 06.07.2020 rev.2 of
	disegno pinza freno Knorr SN6 asse aggiunto: <i>added axle Knorr SN6 brake caliper drawing:</i>	5801492070 del 18.04.2019 rev. A5 of
	disegno disco freno asse aggiunto: <i>added axle brake disc drawing:</i>	7189863 del 21.06.2008 rev. 0 of



SCHEDA INFORMATIVA INFORMATION DOCUMENT

N°
No. **ST_ML225E_13R_01**
del
of **27.10.2020**

MOTIVI DELL'ESTENSIONE - RIEPILOGO REASONS FOR EXTENSION - HISTORY

Scheda informativa <i>Information document</i>	Est. <i>Ext.</i>	Rev. <i>Rev.</i>	Data <i>Date</i>	Descrizione <i>Description</i>
ST_ML225E_13R	00	00	20.07.2020	Nuova omologazione <i>New Approval</i>
ST_ML225E_13R_01	01	00	27.10.2020	Taratura cronotachigrafo a 100 km/h <i>Speed limiting device calibration at 100 km/h</i>

0. DATI GENERALI GENERAL

- 0.1. Marca (denominazione commerciale del costruttore): Iveco / System Truck
Make (trade name of manufacturer):
- 0.2. Tipo ST ML225E 13R
Type:
- Varianti: vedere allegato n° 0.0
Variants: see annex No. 0.0
- Versioni: vedere allegato n° 0.0
Versions: see annex No. 0.0
- 0.2.1. Designazione(i) commerciale(i) (se disponibile): 225E
Commercial name(s) (if available):
- 0.3. Mezzi di identificazione del tipo, se marcati sul veicolo: numero di omologazione del tipo su targhetta
Means of identification of type, if marked on the vehicle: type approval number on manufacturer's plate
- 0.3.1. Posizione della marcatura: targhetta adesiva su parete frontale, dietro griglia radiatore
Location of that marking: adhesive plate on the front wall behind radiator grill
- 0.4. Categoria del veicolo: N3
Category of vehicle:
- 0.5. Nome e indirizzo del costruttore: (fase 1) Iveco S.p.A.
Name and address of manufacturer: (stage 1) I-10156 Torino - via Puglia, 35
(fase 2) S.T. System Truck S.p.A.
(stage 2) I-46048 Roverbella (MN) - Via Paesa, 28
- 0.8. Denominazione/i e indirizzo/i dello/gli stabilimento/i di montaggio: (fase 1) Iveco S.p.A.
Name(s) and address(es) of assembly plant(s): (stage 1) I-25126 Brescia - via Volturmo, 62
(fase 2) S.T. System Truck S.p.A.
(stage 2) I-46048 Roverbella (MN) - Via Paesa, 28
- 0.9. Nome e indirizzo dell'eventuale rappresentante del costruttore: non applicabile
Name and address of the manufacturer's representative (if any): not applicable
- 0.10. Posizione e modalità di fissaggio del marchio di omologazione sul veicolo: targhetta adesiva su parete frontale, dietro griglia radiatore
Location and method of attachment of approval mark on the vehicle: adhesive plate on the front wall behind radiator grill
- ### 1. CARATTERISTICHE COSTRUTTIVE GENERALI DEL VEICOLO GENERAL CONSTRUCTION CHARACTERISTICS OF THE VEHICLE
- 1.1. Fotografie e/o disegni di un veicolo rappresentativo: 55.01.00.0132 del 03.07.2020
Photographs and/or drawings of a representative vehicle: of



SCHEDA INFORMATIVA INFORMATION DOCUMENT

N°
No. ST_ML225E_13R_01
del
of 27.10.2020



Fotografia ¾ anteriore
Photo ¾ front



Fotografia ¾ posteriore
Photo ¾ rear

- | | | | |
|-----------|--|--|--|
| 1.3. | Numero di assi e di ruote:
<i>Number of axles and wheels:</i> | 3 assi
<i>axles</i> | 6 ruote
<i>wheels</i> |
| 1.3.1. | Numero e posizione degli assi con ruote gemellate:
<i>Number and position of axles with double wheels:</i> | 2 assi
<i>axles</i> | 2° e 3° asse
<i>2nd and 3rd axle</i> |
| 1.3.3. | Assi motore (numero, posizione, interconnessione):
<i>Powered axles (number, position, interconnection):</i> | 1 asse
<i>axle</i> | 2° asse
<i>2nd axle</i> meccanica
<i>mechanical</i> |
| 1.8. | Guida:
<i>Hand of drive:</i> | a destra
<i>right</i> | oppure
<i>or</i> a sinistra
<i>left</i> |
| 1.8.1. | Il veicolo è predisposto per la circolazione stradale:
<i>Vehicle is equipped to be driven in:</i> | a sinistra
<i>left hand traffic</i> | oppure
<i>or</i> a destra
<i>right hand traffic</i> |
| 2. | MASSE E DIMENSIONI (in kg e mm)
MASSES AND DIMENSIONS (in kg and mm)
(eventualmente con riferimento ai disegni)
(refer to drawing where applicable) | | |
| 2.1 | Interasse o interassi (a pieno carico)
<i>Wheelbase(s) (fully loaded)</i> | | |
| 2.1.1 | Veicoli a 2 assi:
<i>Two axle vehicles:</i> | non ricorre
<i>not applicable</i> | |
| 2.1.1.1 | Veicoli a 3 o più assi
<i>Vehicles with three or more axles</i> | ricorre
<i>applicable</i> | |
| 2.1.1.1.1 | Distanza tra assi consecutivi, da quello in posizione più avanzata a quello in posizione più arretrata:
<i>Axle spacing between consecutive axles going from the foremost to the rearmost axle:</i> | vedere allegato n°
<i>see annex No. 1</i> | 1 |
| 2.2 | Ralla
<i>Fifth wheel</i> | | |
| 2.2.2 | Veicoli trattori di semirimorchi:
<i>In case of semi-trailer towing vehicles:</i> | non ricorre
<i>not applicable</i> | |
| 2.3.1. | Carreggiata di ciascun asse sterzante:
<i>Track of each steered axle:</i> | 1°: 1945 ÷ 1970 | |
| 2.6. | Massa del veicolo carrozzato, con il dispositivo di accoppiamento se veicolo trattore di categoria diversa dalla categoria M1, in ordine di marcia, oppure massa del telaio cabinato qualora il costruttore non fornisca la carrozzeria e/o il dispositivo di accoppiamento [compresi liquido refri- | | |



SCHEDA INFORMATIVA INFORMATION DOCUMENT

N°
No. ST_ML225E_13R_01
del
of 27.10.2020

gerante, lubrificanti, carburante, 100 % di altri liquidi, escluse le acque usate, attrezzi, ruota di scorta e conducente e, nel caso degli autobus, la massa di una seconda persona (75 kg) se nel veicolo è previsto per essa un apposito sedile]: (massima e minima):

vedere allegato n° 1.1.

Mass of the vehicle with bodywork, and with coupling device in the case of a towing vehicle of category other than M1 in running order, or mass of the chassis with cab if the manufacturer does not fit the bodywork and/or coupling device (including coolant, oils, fuel, 100 % other liquids except used waters, tools, spare wheel and driver and, for buses and coaches, the mass of the crew member (75 kg) if there is a crew seat in the vehicle):

(maximum and minimum):

see annex No. 1.1.

- 2.6.1. Distribuzione di tale massa tra gli assi e, nel caso di un semirimorchio o di un rimorchio ad asse centrale, carico gravante sul punto di aggancio (massima e minima per ogni variante):

vedere allegato n° 1.1.

Distribution of this mass among the axles and, in the case of a semitrailer or centre-axle trailer, load on the coupling point (maximum and minimum for each variant):

see annex No. 1.1.

- 2.7. Massa minima del veicolo completato dichiarata dal costruttore, nel caso di un veicolo incompleto:

6950

Minimum mass of the completed vehicle as stated by the manufacturer, in the case of an incomplete vehicle:

- 2.7.1. Ripartizione di tale massa sugli assi e, nel caso di un semirimorchio o di un rimorchio ad asse centrale, carico gravante sul punto di accoppiamento:

1°: 3740

Distribution of this mass among the axles and, in the case of semitrailer or centre-axle trailer, load on the coupling point:

2° + 3°: 3210

- 2.8. Massa massima a pieno carico tecnicamente ammissibile dichiarata dal costruttore (massima e minima):

22500

Technically permissible maximum laden mass stated by the manufacturer (maximum and minimum for each variant):

- 2.8.1. Distribuzione di tale massa tra gli assi e, nel caso di un semirimorchio o di un rimorchio ad asse centrale, carico gravante sul punto di aggancio (massima e minima):

vedere allegato n° 1

Distribution of this mass among the axles and, in the case of a semitrailer or centre-axle trailer, load on the coupling point (maximum and minimum for each variant):

see annex No. 1

- 2.9. Carico/massa massima tecnicamente ammissibile su ciascun asse:

vedere allegato n° 1

Technically permissible maximum mass on each axle:

see annex No. 1

- 2.10. Carico/massa massima tecnicamente ammissibile su ciascun gruppo di assi:

vedere allegato n° 1

Technically permissible maximum load/mass on each axle group:

see annex No. 1

- 2.11. Massa massima rimorchiabile tecnicamente ammissibile del veicolo a motore in caso di

Technically permissible maximum towable mass of the motor vehicle in case of

- 2.11.1. - rimorchio a timone:
- drawbar trailer:

vedere allegato n° 1
see annex No. 1

- 2.11.2. - semirimorchio:
- semi-trailer:

non ricorre
not applicable

- 2.11.3. - rimorchio ad asse centrale:
- centre-axle trailer:

vedere punto 2.11.1.
see point 2.11.1.



SCHEDA INFORMATIVA INFORMATION DOCUMENT

N°
No. ST_ML225E_13R_01
del
of 27.10.2020

- 2.11.4. - rimorchio a timone rigido: vedere punto 2.11.1.
- *rigid drawbar trailer:* see point 2.11.1.
- 2.11.5. Massa massima a pieno carico tecnicamente ammissibile
della combinazione di veicoli: vedere allegato n° 1
Technically permissible maximum mass of the combination: see annex No. 1
- 2.11.6. Massa massima del rimorchio non frenato: 750
Maximum mass of unbraked trailer:
- 2.12. Carico verticale statico/massa massima tecnicamente
ammissibile sul punto di aggancio
*Technically permissible maximum static vertical load/mass on the
vehicle's coupling point*
- 2.12.1. - di un veicolo trainante: frenatura ad inerzia 140
- *of a towing vehicle:* *inertia braking system:*

frenatura continua: 1000
continuous braking system:
3. **CONVERTITORE DELL'ENERGIA DI PROPULSIONE**
PROPULSION ENERGY CONVERTER
- 3.1. Costruttore del convertitore o dei convertitori dell'energia
di propulsione: FPT Industrial S.p.A.
Manufacturer of the propulsion energy converter(s):
- 3.1.1. Codice del costruttore (apposto sul convertitore dell'ener- 2
gia di propulsione, o altri mezzi di identificazione): vedere allegato n°
*Manufacturer's code (as marked on the propulsion energy converter
or other means of identification):* see annex No. 2
- 3.2. Motore a combustione interna
Internal combustion engine
- 3.2.1.1. Principio di funzionamento: accensione spontanea quattro tempi
Working principle: *compression ignition* *four stroke*
- 3.2.1.9. Regime massimo ammesso, dichiarato dal costruttore: vedere allegato n° 2
Max. permitted engine speed as prescribed by the manufacturer: see annex No. 2
- 3.2.5. Impianto elettrico
Electrical system
- 3.2.5.1. Tensione nominale: 24 V, terminale a massa: negativo
Rated voltage: *V, ground:* *negative*
- 3.2.5.2. Generatore
Generator
- 3.2.5.2.1. Tipo: Alternatore Bosch
Type: *Alternator*
- 3.2.5.2.2. Potenza nominale: 2160 ÷ 3600 VA
Nominal output:
- 3.3. Motore elettrico
Electric motor
- 3.3.1. Tipo (avvolgimento, eccitazione): non ricorre
Type (winding, excitation): *not applicable*
- 3.3.1.1. Massima potenza oraria: non ricorre
Maximum hourly output: *not applicable*
- 3.3.1.2. Tensione di esercizio: non ricorre
Operating voltage: *not applicable*



SCHEDA INFORMATIVA INFORMATION DOCUMENT

N°
No. **ST_ML225E_13R_01**
del
of **27.10.2020**

3.3.2. Batteria
Battery

3.3.2.2. Massa: non ricorre
Mass: not applicable

3.4. Altri motori o propulsori o loro combinazioni (indicazione degli elementi di questi tipi di motori): non ricorre
Other engines or motors or combinations thereof (particulars regarding the parts of such engines or motors): not applicable

4. TRASMISSIONE *TRANSMISSION*

4.2. Tipo di trasmissione (meccanica, idraulica, elettrica, ecc.): meccanica
Type (mechanical, idraulic, electric,...): mechanical

4.6. Rapporti di trasmissione: invariati rispetto al veicolo fase 1
Gear ratios: unchanged respect to the stage 1 vehicle

Marcia <i>Gear</i>	Rapporti del cambio (rapporti tra il numero di giri dell'albero motore e quelli dell'albero secondario del cambio) <i>Internal gearbox ratios (ratios of engine to gearbox output shaft revolutions)</i>	Rapporto(i) al ponte (rapporto tra il numero di giri dell'albero secondario e quelli delle ruote motrici) <i>Final drive ratio(s) (ratio of gearbox output shaft to driven wheel revolutions)</i>	Rapporti totali di trasmissione <i>Total gear ratios</i>
Massimo ⁽¹⁾ <i>Maximum for CVT ⁽¹⁾</i> 1 2 5 6 Minimo ⁽¹⁾ <i>Minimum for CVT ⁽¹⁾</i> Retromarcia <i>Reverse</i>			

⁽¹⁾ Trasmissione cambio continuo.

Continuously variable transmission.

4.7. Velocità massima del veicolo: 130 km/h
Maximum vehicle speed:
con limitatore di velocità: max 90 oppure 100 km/h
with speed limiting device: max 90 or 100 km/h

5. ASSI *AXLES*

5.4. Posizione dell'asse o degli assi sollevabili: non ricorre
Position of retractable axle(s): not applicable

6. SOSPENSIONE *SUSPENSION*

6.1. Disegno dei dispositivi di sospensione: 1° asse: sospensione meccanica o pneumatica (optional)
Drawing of the suspension arrangements: 1st axle: mechanical suspension or air suspension (facoltative)
2° asse: sospensione pneumatica
2nd axle: air suspension
3° asse: vedere dis. n° 10.01.10.0009 del 28.08.2014
3rd axle: see drawing No. of



SCHEDA INFORMATIVA INFORMATION DOCUMENT

N°
No. ST_ML225E_13R_01
del
of 27.10.2020

- 6.2. Tipo e modello della sospensione di ciascun asse o gruppi di asse o ruota:
Type and design of the suspension of each axle or group of axles or wheel:
- 1°: molle a balestra con foglie a spessore variabile oppure costante oppure sospensione pneumatica (optional)
leaf springs with leaves having variable or constant tickness or air suspension (facoltative)
- 2°: sospensione pneumatica
air suspension
- 3° asse: vedere dis. molla pneumatica n° 98490464 del 26.08.2014 e dis. ammortizzatore n° 504147623 del 26.08.2014
3rd axle: see diapress drawing No. 98490464 of 26.08.2014 and shock absorber drawing No. 504147623 of 26.08.2014
- 6.6. Pneumatici e ruote
Tyres and wheels
- 6.6.1. Combinazione(i) pneumatico/ruota (per i pneumatici, indicare la designazione delle dimensioni, l'indice di capacità di carico minimo, il simbolo della categoria di velocità minima; per le ruote, indicare le dimensioni del cerchione e della campanatura)
Tyre/Wheel combination(s) (for tyres indicate size designation, minimum load-capacity index, minimum speed category symbol; for wheels indicate rim size(s) and off-set)
- 6.6.1.1. Assi
Axels
- 6.6.1.1.1. Asse 1:
Axel 1: vedere allegato n° 3
see annex No. 3
- 6.6.1.1.2. Asse 2:
Axel 2: vedere allegato n° 3
see annex No. 3
- 6.6.1.1.3. Asse 3:
Axel 3: vedere allegato n° 3
see annex No. 3
- 6.6.2. Limiti superiore e inferiore dei raggi di rotolamento:
Upper and lower limits of rolling radii:
- 6.6.2.1. Asse 1:
Axel 1: 435 ÷ 510 mm
- 6.6.2.2. Asse 2:
Axel 2: 435 ÷ 510 mm
- 6.6.2.3. Asse 3:
Axel 3: 435 ÷ 510 mm
- 6.6.3. Pressione/i degli pneumatici raccomandata/e dal costruttore del veicolo:
Tyre pressure(s) as recommended by the vehicle manufacturer:
- 6.6.3.1. 1° asse:
1st axle: vedere punto 6.6.1.1.1.
see point 6.6.1.1.1.
- 6.6.3.2. 2° asse:
2nd axle: vedere punto 6.6.1.1.2.
see point 6.6.1.1.2.
- 6.6.3.3. 3° asse:
3rd axle: vedere punto 6.6.1.1.3.
see point 6.6.1.1.3.



SCHEDA INFORMATIVA INFORMATION DOCUMENT

N°
No. **ST_ML225E_13R_01**
del
of **27.10.2020**

6.6.5. Breve descrizione dell'eventuale unità di scorta per uso temporaneo:

non ricorre
not applicable

Brief description of temporary-use spare unit, if any:

8. FRENI BRAKES

8.1. Tipo e caratteristiche dei freni, conformemente al punto 2.6 del Regolamento UNECE 13) con uno schema dimensionale inclusi dati e disegni dei tamburi, dei dischi, dei tubi, marca e tipo delle ganasce/pastiglie e/o guarnizioni, superfici frenanti effettive, raggio dei tamburi, delle ganasce o dei dischi, massa dei tamburi, dei dispositivi di regolazione, delle parti interessate dello/gli asse/i e della sospensione):

Type and characteristics of the brakes as defined in point 2.6 of Regulation UNECE 13 including details and drawings of the drums, discs, hoses make and type of shoe/pad assemblies and/or linings, effective braking areas, radius of drums, shoes or discs, mass of drums, adjustment devices, relevant parts of the axle(s) and suspension:

vedere dis. n° 25.01.05.0076 del 01.07.2020
oppure dis. n° 25.01.05.0031 del 06.07.2020

*see drawing No. 25.01.05.0076 of 01.07.2020
or drawing No. 25.01.05.0031 of 06.07.2020*

1° asse: invariato rispetto al veicolo base, con omologazione:

1st axle: E3 13R-11 4187 00 del 07.07.2012
aggiornata all'estensione: E3*13R11/16*4187*10
del 11.11.2019
- freno a disco Ø377 mm
- brake chamber: 22"
- guarnizioni freni: Galfer 3358, Ferodo 4550 oppure Textar T3030
*unchanged, respect to stage I vehicle, with approval:
E3 13R-11 4187 00 of 07.07.2012 updated by extension
E3*13R11/16*4187*10 of 11.11.2019
- disc brake: Ø377 mm
- brake chamber: 22"
- brake linings: Galfer 3358, Ferodo 4550 or Textar T3030*

2° asse: invariato rispetto al veicolo base, con omologazione:

2nd axle: E3 13R-11 4187 00 del 07.07.2012
aggiornata all'estensione: E3*13R11/16*4187*10
del 11.11.2019
- freno a disco Ø377 mm
- brake chamber: 18/27"
- guarnizioni freni: Galfer 3358, Ferodo 4550 oppure Textar T3030
*unchanged, respect to stage I vehicle, with approval:
E3 13R-11 4187 00 of 07.07.2012 updated by extension
E3*13R11/16*4187*10 of 11.11.2019
- disc brake: Ø377 mm
- brake chamber: 18/27"
- brake linings: Galfer 3358, Ferodo 4550 or Textar T3030*

3° asse: - disegno pinze n° 5801492070 del 18.04.2019

3rd axle: - disegno disco freno n° 7189863 del 21.06.2008
- freno a disco Ø377 mm
- brake chamber: 18/27"
- guarnizioni freni: Galfer 3358, Ferodo 4550 oppure Textar T3030
- brake pad drawing No. 5801492070 del 18.04.2019
- disc brake drawing No. 7189863 of 21.06.2008
- disc brake: Ø377 mm
- brake chamber: 18/27"
- brake linings: Galfer 3358, Ferodo 4550 or Textar T3030



SCHEDA INFORMATIVA INFORMATION DOCUMENT

N°
No. **ST_ML225E_13R_01**
del
of **27.10.2020**

- 8.2. Curva di funzionamento, descrizione e/o disegno dei sistemi di frenatura descritti al punto 2.3 del Regolamento UNECE 13, compresi dati e disegni della trasmissione e dei dispositivi di comando:
Operating diagram, description and/or drawing of the braking systems described in point 2.3 of Regulation UNECE 13 including details and drawings of the transmission and controls:
- invariato rispetto al veicolo base, con omologazione:
E3 13R-11 4187 00 del 07.07.2012
aggiornata all'estensione: E3*13R11/16*4187*10 del 11.11.2019
*unchanged, respect to stage I vehicle, with approval: E3 13R-11 4187 00 of 07.07.2012 updated by extension E3*13R11/16*4187*10 of 11.11.2019*
- 8.2.1. Impianto frenante di servizio:
Service braking system:
- pneumatico, a 2 circuiti indipendenti
uno per 1° asse, uno per 2° e 3° asse
*pneumatic, 2 independent circuits
one for 1st axles, one for 2nd and 3rd axles*
- 8.2.2. Impianto frenante di soccorso:
Secondary braking system:
- conglobato con il freno di stazionamento
included with parking braking system
- 8.2.3. Impianto del freno di stazionamento:
Parking braking system:
- meccanico a molla, agente su: 2° asse
trasmissione: pneumatica
e con comando: a mano
*by the spring-brake actuator of the: axles 2nd
transmission: pneumatic
and control: hand*
- 8.2.4. Eventuali impianti frenanti complementari:
Any additional braking system:
- freno motore con comando indipendente;
optional con rallentatore di tipo elettromagnetico oppure idrodinamico a magneti permanenti.
*exhaust brake with separate control;
optional retarder electromagnetic type or hydrodynamic type or permanent magnet type.*
- 8.2.5. Impianto frenante d'emergenza in caso di distacco accidentale del rimorchio:
Break-away braking system:
- 8.3. Comando e trasmissione degli impianti frenanti del rimorchio in veicoli destinati al traino di un rimorchio:
Control and transmission of trailer braking systems in vehicles designed to tow a trailer:
- vedere disegno n° 25.01.05.0076 del 01.07.2020
oppure disegno n° 25.01.05.0031 del 06.07.2020
*see drawing No. 25.01.05.0076 of 01.07.2020
or drawing No. 25.01.05.0031 of 06.07.2020*
- 8.4. Veicolo è predisposto per il traino di un rimorchio dotato di sistema pneumatico di frenatura di servizio:
Vehicle is equipped to tow a trailer with pneumatic service brakes:
- sì
yes
- 8.5. Sistema antibloccaggio:
Anti-lock braking system:
- sì centralina Wabco 446 004 652 0
approvazione E1 10R-031803
*yes control unit Wabco 446 004 652 0
approval E1 10R-031803*
- 8.5.1. Per i veicoli muniti di sistemi di frenatura antibloccaggio, descrizione del funzionamento del sistema (compresi eventuali elementi elettronici), curva del bloccaggio elettrico e schema del circuito idraulico o pneumatico:
For vehicles with anti-lock braking systems, description of system operation (including any electronic parts), electric block diagram, hydraulic or pneumatic circuit plan:
- invariato rispetto al veicolo fase 1, con omologazione
E3 13R-11 4187 00 del 07.07.2012, aggiornata dall'estensione E3*13R11/16*4187*10 del 11.11.2019
*unchanged, respect to stage I vehicle, with approval: E3 13R-11 4187 00 of 07.07.2012 updated by extension E3*13R11/16*4187*10 of 11.11.2019*
- 8.6. Calcoli e curve conformemente al Regolamento UNECE 13 o all'appendice all'allegato 14, se applicabile:
Calculation and curves according to UNECE Regulation 13 or to the Appendix to Annex 14 thereto if applicable:
- vedere punto 8.5.1.
see point 8.5.1.
- 8.7. Descrizione e/o disegno del sistema di alimentazione di energia, da indicare anche nel caso dei sistemi di frenatura servoassistiti:
- vedere punto 8.5.1.



SCHEDA INFORMATIVA INFORMATION DOCUMENT

N°
No. ST_ML225E_13R_01
del
of 27.10.2020

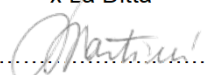
Description and/or drawing of the energy supply, also to be specified for power-assisted braking systems:

see point 8.5.1.

- 8.7.1. Nel caso di sistemi ad aria compressa, pressione di esercizio p_2 nel o nei serbatoi: 11,2 bar
In the case of compressed-air braking systems, working pressure p_2 in the pressure reservoir(s):
- 8.7.2. Nel caso di sistemi di frenatura a depressione, livello iniziale di energia nel o nei serbatoi: non ricorre
In the case of vacuum braking systems, the initial energy level in the reservoir(s): not applicable
- 8.8. Calcolo del sistema di frenatura: determinazione del rapporto tra la somma delle forze frenanti alla periferia delle ruote e le forze esercitate sul comando del freno: non ricorre
Calculation of the braking system: determination of the ratio between the total braking forces at the circumference of the wheels and the force applied to the braking control: not applicable
- 8.9. Breve descrizione dei sistemi di frenatura conformemente al punto 11. dell'appendice 1 dell'allegato 2 del Regolamento UNECE 13: vedere punto 8.5.1.
Brief description of the braking systems according to point 11. of the Appendix 1 of Annex 2 to UNECE Regulation 13: see point 8.5.1.
- 8.10. Se viene richiesta l'esenzione dalle prove di tipo I e/o di tipo II o di tipo III, indicare il numero del verbale conformemente all'appendice 3 dell'allegato 11 al Regolamento UNECE 13: non ricorre
If claiming exemptions from the Type I and/or Type II or Type III tests, state the number of the report in accordance with Appendix 3 of Annex 11 to UNECE Regulation 13: not applicable
- 8.11. Dati del tipo o dei tipi di sistemi di frenatura elettronica (EBS): vedere punto 8.5.1.
Particulars of the type(s) of endurance braking system(s) (EBS): see point 8.5.1.

Revisione 0 del 27.10.2020
Revision of

x La Ditta


(ing. Paolo MARTINI)
I. SYSTEM TRUCK S.p.A.
Via Cassa, 28 - 46048 ROVERBELLA (Mn) ITALY
C.F. 02209770797 - P.IVA: 03117430235
Tel. +39 0376 696809
e-mail: info@stsystemtruck.com
PEC: stsystemtruck@legalmail.it
Ruolo: Direttore tecnico
Position: Technical Director



SCHEDA INFORMATIVA **INFORMATION DOCUMENT**

All n° **0.0**
Annex Nr
del
of **27.10.2020**

Caratteristiche Characteristics	Descrizione Description	Tipo Type	Varianti Variants	Versioni Versions
Nome trasformatore Coverter's company name	S.T. System Truck S.p.A.	ST		
Tipo di veicolo della fase II Type of stage II	Autotelaio, cat. N3, 3 assi, massa complessiva 22500 kg Chassis, cat. N3, 3 axles, maximum mass 22500 kg	ML225E		
Fase di completamento Extent of build	Incompleto / Incomplete		I	
Designazione commerciale (veicolo 1° fase) Commercial name (1 st stage vehicle)	225E (150E)		CC	
	225E (160E)		CD	
Massa massima tecnicamente ammissibile (fase 1) Technical admissible maximum mass (stage 1)	22500 kg (13000 kg)		L	
	22500 kg (14000 kg)		M	
	22500 kg (15000 kg)		N	
	22500 kg (15990 kg)		P	
	22500 kg (16000 kg)		R	
Assi sterzanti (n°, posizione) Steering axle (No., position)	1, 1° 1, 1 st			1
Assi motore (n°, posizione) Powered axles (No., position)	1, 2° 1, 2 nd			1
Tipo motore Engine type	F4AFE411C			4
	F4AFE611A, F4AFE611D, F4AFE611E o/or F4AFE611K			5
Potenza del motore Engine power	152 kW			P
	162 kW			R
	185 kW			S
	235 kW			V
	207 kW			W
Classificazione ADR ADR classification	EXII, EXIII, FL, AT (ADR 2019)			1
	senza equipaggiamento ADR / without ADR equipment			2



SCHEDA INFORMATIVA INFORMATION DOCUMENT

All n° **0.0**
Annex Nr
del
of **27.10.2020**

Caratteristiche Characteristics	Descrizione Description	Tipo Type	Varianti Variants	Versioni Versions
Massa tecnicamente ammissibile su 1° asse <i>Technically permissible mass on 1st axle</i>	5300 kg			P
	5800 kg			S
	6100 kg			T
Massa tecnicamente ammissibile su 2° asse e 3° asse <i>Technically permissible mass on 2nd and 3rd axle</i>	2: 9500 kg - 3: 9500 kg			N
	2: 10000 kg - 3: 10000 kg			O
	2: 10700 kg - 3: 10700 kg			Q
	2: 10900 kg - 3: 10900 kg			R
	2: 11000 kg - 3: 11000 kg			S
Massa massima tecnicamente ammissibile della combinazione <i>Technically permissible mass of combination</i>	Non atto / <i>not towing</i>			1
	26000 kg			5
	32500 kg			8
	35000 kg			9
	36000 kg			B
Massa max a carico amm. per l'imm. / circolazione <i>Intended registration / in service max permissible laden mass</i>	Non ricorre / <i>not applicable</i>			0
Uscita gas di scarico <i>Exhaust exit</i>	laterale sinistra / <i>side left</i>			A
Direttiva emissioni <i>Directive emission</i>	EURO VI-D			D
Tipo di cambio <i>Type of gear</i>	Manuale / <i>manual</i>			A
	Automatico / <i>automatic</i>			B
Tipo di sospensione <i>Type of suspension</i>	1°: sosp. meccanica o pneumatica / <i>mechanical or air suspension</i>			P
	2°: sosp. pneumatica / <i>air suspension</i>			
	3°: sosp. pneumatica / <i>air suspension</i>			
Configurazione e numero porte <i>Configuration and number of doors</i>	2 (cab. MLC o/or MLL)			2



SCHEDA INFORMATIVA INFORMATION DOCUMENT

N°

Nr

del

of

0.1

27.10.2020

PARTE II PART II

Possibili combinazioni (tipo / varianti / versioni)

Permissible combinations (type / variants / versions)

Variante Variant	Versione Version
I CC L 1 1 4 P	1 P N 1 0 A D A P 2 2 5
I CC L 1 1 4 P	1 P N 1 0 A D B P 2 2
I CC L 1 1 5 R	1 P N 1 0 A D A P 2 2 5
I CC L 1 1 5 R	1 P N 1 0 A D B P 2 2
I CC L 1 1 5 S	1 P N 1 0 A D A P 2 2 8
I CC L 1 1 5 S	1 P N 1 0 A D B P 2 2
I CC L 1 1 5 V	1 P N 1 0 A D A P 2 2 8
I CC L 1 1 5 V	1 P N 1 0 A D B P 2 2
I CC L 1 1 5 W	1 P N 1 0 A D A P 2 2 8
I CC L 1 1 5 W	1 P N 1 0 A D B P 2 2
I CC M 1 1 4 P	1 P Q 1 0 A D A P 2 2 5
I CC M 1 1 4 P	1 P Q 1 0 A D B P 2 2
I CC M 1 1 5 R	1 P Q 1 0 A D A P 2 2 5
I CC M 1 1 5 R	1 P Q 1 0 A D B P 2 2
I CC M 1 1 5 S	1 P Q 1 0 A D A P 2 2 5
I CC M 1 1 5 S	1 P Q 1 0 A D B P 2 2
I CC M 1 1 5 V	1 P Q 1 0 A D A P 2 2 9
I CC M 1 1 5 V	1 P Q 1 0 A D B P 2 2
I CC M 1 1 5 W	1 P Q 1 0 A D A P 2 2 9
I CC M 1 1 5 W	1 P Q 1 0 A D B P 2 2

Variante Variant

I	CC	N	1	1	4	P
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I	CC	N	1	1	4	P
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I	CC	N	1	1	5	R
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I	CC	N	1	1	5	R
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I	CC	N	1	1	5	S
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I	CC	N	1	1	5	S
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I	CC	N	1	1	5	V
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I	CC	N	1	1	5	V
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I	CC	N	1	1	5	W
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I	CC	N	1	1	5	W
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I	CD	L	1	1	4	P
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I	CD	L	1	1	4	P
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I	CD	L	1	1	5	R
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I	CD	L	1	1	5	R
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I	CD	L	1	1	5	S
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I	CD	L	1	1	5	S
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I	CD	L	1	1	5	V
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I	CD	L	1	1	5	V
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I	CD	L	1	1	5	W
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I	CD	L	1	1	5	W
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I	CD	M	1	1	4	P
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I	CD	M	1	1	4	P
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I	CD	M	1	1	5	R
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I	CD	M	1	1	5	R
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I	CD	M	1	1	5	S
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Versione Version

1	P	Q	1	0	A	D	A	P	2
2			5						

1	P	Q	1	0	A	D	B	P	2
2									

1	P	Q	1	0	A	D	A	P	2
2			5						

1	P	Q	1	0	A	D	B	P	2
2									

1	P	Q	1	0	A	D	A	P	2
2			8						

1	P	Q	1	0	A	D	B	P	2
2									

1	P	Q	1	0	A	D	A	P	2
2			9						

1	P	Q	1	0	A	D	B	P	2
2									

1	P	Q	1	0	A	D	A	P	2
2			9						

1	P	Q	1	0	A	D	B	P	2
2									

1	T	O	1	0	A	D	A	P	2
2			5						

1	T	O	1	0	A	D	B	P	2
2									

1	T	O	1	0	A	D	A	P	2
2			5						

1	T	O	1	0	A	D	B	P	2
2									

1	T	O	1	0	A	D	A	P	2
2			8						

1	T	O	1	0	A	D	B	P	2
2									

1	T	O	1	0	A	D	A	P	2
2			8						

1	T	O	1	0	A	D	B	P	2
2									

1	T	O	1	0	A	D	A	P	2
2			8						

1	T	O	1	0	A	D	B	P	2
2									

1	T	S	1	0	A	D	A	P	2
2			5						

1	T	S	1	0	A	D	B	P	2
2									

1	T	S	1	0	A	D	A	P	2
2			5						

1	T	S	1	0	A	D	B	P	2
2									

1	T	S	1	0	A	D	A	P	2
2			8						

Variante Variant

I	CD	M	1	1	5	S
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I	CD	M	1	1	5	V
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I	CD	M	1	1	5	V
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I	CD	M	1	1	5	W
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I	CD	M	1	1	5	W
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I	CD	N	1	1	4	P
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I	CD	N	1	1	4	P
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I	CD	N	1	1	5	R
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I	CD	N	1	1	5	R
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I	CD	N	1	1	5	S
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I	CD	N	1	1	5	S
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I	CD	N	1	1	5	V
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I	CD	N	1	1	5	V
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I	CD	N	1	1	5	W
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I	CD	N	1	1	5	W
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I	CD	P	1	1	4	P
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I	CD	P	1	1	4	P
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I	CD	P	1	1	4	P
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I	CD	P	1	1	4	P
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I	CD	P	1	1	5	R
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I	CD	P	1	1	5	R
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I	CD	P	1	1	5	R
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I	CD	P	1	1	5	R
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I	CD	P	1	1	5	S
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I	CD	P	1	1	5	S
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Versione Version

1	T	S	1	0	A	D	B	P	2
2									

1	T	S	1	0	A	D	A	P	2
2			9						

1	T	S	1	0	A	D	B	P	2
2									

1	T	S	1	0	A	D	A	P	2
2			9						

1	T	S	1	0	A	D	B	P	2
2									

1	T	S	1	0	A	D	A	P	2
2			5						

1	T	S	1	0	A	D	B	P	2
2									

1	T	S	1	0	A	D	A	P	2
2			5						

1	T	S	1	0	A	D	B	P	2
2									

1	T	S	1	0	A	D	A	P	2
2			8						

1	T	S	1	0	A	D	B	P	2
2									

1	T	S	1	0	A	D	A	P	2
2			9						

1	T	S	1	0	A	D	B	P	2
2									

1	T	S	1	0	A	D	A	P	2
2			9						

1	T	S	1	0	A	D	B	P	2
2									

1	T	S	1	0	A	D	A	P	2
2			5						

1	T	S	1	0	A	D	B	P	2
2									

1	S	R	1	0	A	D	A	P	2
2			5						

1	S	R	1	0	A	D	B	P	2
2									

1	T	S	1	0	A	D	A	P	2
2			5						

1	T	S	1	0	A	D	B	P	2
2									

1	S	R	1	0	A	D	A	P	2
2			5						

1	S	R	1	0	A	D	B	P	2
2									

1	T	S	1	0	A	D	A	P	2
2			8						

1	T	S	1	0	A	D	B	P	2
2									

Variante Variant

I	CD	P	1	1	5	S
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I	CD	P	1	1	5	S
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I	CD	P	1	1	5	V
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I	CD	P	1	1	5	V
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I	CD	P	1	1	5	V
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I	CD	P	1	1	5	V
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I	CD	P	1	1	5	W
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I	CD	P	1	1	5	W
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I	CD	P	1	1	5	W
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I	CD	P	1	1	5	W
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I	CD	P	1	1	5	W
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I	CD	P	1	1	5	W
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I	CD	R	1	1	4	P
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I	CD	R	1	1	4	P
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I	CD	R	1	1	4	P
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I	CD	R	1	1	4	P
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I	CD	R	1	1	5	R
---	----	---	---	---	---	---

I	CD	R	1	1	5	R
---	----	---	---	---	---	---

I	CD	R	1	1	5	R
---	----	---	---	---	---	---

I	CD	R	1	1	5	R
---	----	---	---	---	---	---

I	CD	R	1	1	5	S
---	----	---	---	---	---	---

I	CD	R	1	1	5	S
---	----	---	---	---	---	---

I	CD	R	1	1	5	S
---	----	---	---	---	---	---

I	CD	R	1	1	5	S
---	----	---	---	---	---	---

I	CD	R	1	1	5	V
---	----	---	---	---	---	---

Versione Version

1	S	R	1	0	A	D	A	P	2
2				8					

1	S	R	1	0	A	D	B	P	2
2									

1	T	S	1	0	A	D	A	P	2
2				8					

1	T	S	1	0	A	D	B	P	2
2									

1	S	R	1	0	A	D	A	P	2
2				8					

1	S	R	1	0	A	D	B	P	2
2									

1	T	S	1	0	A	D	A	P	2
				9					

2	T	S	1	0	A	D	A	P	2
				B					

1	T	S	1	0	A	D	B	P	2
2									

1	S	R	1	0	A	D	A	P	2
				9					

2	S	R	1	0	A	D	A	P	2
				B					

1	S	R	1	0	A	D	B	P	2
2									

1	T	S	1	0	A	D	A	P	2
2				5					

1	T	S	1	0	A	D	B	P	2
2									

1	S	R	1	0	A	D	A	P	2
2				5					

1	S	R	1	0	A	D	B	P	2
2									

1	T	S	1	0	A	D	A	P	2
2				5					

1	T	S	1	0	A	D	B	P	2
2									

1	S	R	1	0	A	D	A	P	2
2				5					

1	S	R	1	0	A	D	B	P	2
2									

1	T	S	1	0	A	D	A	P	2
2				8					

1	T	S	1	0	A	D	B	P	2
2									

1	S	R	1	0	A	D	A	P	2
2				8					

1	S	R	1	0	A	D	B	P	2
2									

1	T	S	1	0	A	D	A	P	2
2				8					

Variante
Variant

I | CD | R | 1 | 1 | 5 | V

I | CD | R | 1 | 1 | 5 | V

I | CD | R | 1 | 1 | 5 | V

I | CD | R | 1 | 1 | 5 | W

I | CD | R | 1 | 1 | 5 | W

I | CD | R | 1 | 1 | 5 | W

I | CD | R | 1 | 1 | 5 | W

I | CD | R | 1 | 1 | 5 | W

I | CD | R | 1 | 1 | 5 | W

Versione
Version

1 | T | S | 1 | 0 | A | D | B | P | 2
2 |

1 | S | R | 1 | 0 | A | D | A | P | 2
2 | 8 |

1 | S | R | 1 | 0 | A | D | B | P | 2
2 |

1 | T | S | 1 | 0 | A | D | A | P | 2
9 |

2 | T | S | 1 | 0 | A | D | A | P | 2
B |

1 | T | S | 1 | 0 | A | D | B | P | 2
2 |

1 | S | R | 1 | 0 | A | D | A | P | 2
9 |

2 | S | R | 1 | 0 | A | D | A | P | 2
B |

1 | S | R | 1 | 0 | A | D | B | P | 2
2 |



SCHEMA INFORMATIVA **INFORMATION DOCUMENT**

All n° **1**
Annex Nr
del **27.10.2020**
of

Punto Item	Variant Variant	Versione Version	Descrizione Description	
2.1.1.1.1	????????	????????	1° ÷ 2°: 5850 mm	2° ÷ 3°: 1395 mm
2.8.1.	????????	?PN??????	1°: min max	2°: min max
	????????	?PQ??????	4500 5300 kg	8600 9000 kg
	????????	?SR??????	4500 5800 kg	8350 9000 kg
	????????	?TO??????	4500 6100 kg	8200 9000 kg
	????????	?TS??????	4500 6100 kg	8200 9000 kg
2.9.	????????	?PN??????	1°: 5300 kg	2°: 9500 kg
	????????	?PQ??????	5300 kg	10700 kg
	????????	?SR??????	5800 kg	10900 kg
	????????	?TO??????	6100 kg	10000 kg
	????????	?TS??????	6100 kg	11000 kg
2.10.	????????	?PN??????	1°: 5300 kg	2°: 18000 kg
	????????	?PQ??????	5300 kg	18000 kg
	????????	?SR??????	5800 kg	18000 kg
	????????	?TO??????	6100 kg	18000 kg
	????????	?TS??????	6100 kg	18000 kg
2.11.1.	?C?N????	???1??????	Frenatura ad inerzia Inertia braking system	Frenatura continua Continuous braking system
	?C?P????	???1??????	3500 kg	0 kg
	?C?R????	???1??????	3500 kg	0 kg
	?C?N114?	???5??????	3500 kg	0 kg
	?CDP114?	???5??????	3500 kg	3500 kg
	?CDR114?	???5??????	3500 kg	3500 kg
	?C??115?	???5??????	3500 kg	3500 kg
	?C?N115?	???8??????	3500 kg	10000 kg
	?C?P115?	???8??????	3500 kg	10000 kg
	?C?R115?	???8??????	3500 kg	10000 kg
	?C?N115?	???9??????	3500 kg	12500 kg
	?C?P115?	???9??????	3500 kg	12500 kg
	?C?R115?	???9??????	3500 kg	12500 kg
	?C?N115?	???B??????	3500 kg	13500 kg
	?C?P115?	???B??????	3500 kg	13500 kg
	?C?R115?	???B??????	3500 kg	13500 kg
2.11.5.	?C?N????	???1??????	26000 kg	non atto al traino (*) / not towing (*)
	?C?P????	???1??????	26000 kg	non atto al traino (*) / not towing (*)
	?C?R????	???1??????	26000 kg	non atto al traino (*) / not towing (*)
	?C?N114?	???5??????	26000 kg	
	?CDP114?	???5??????	26000 kg	
	?CDR114?	???5??????	26000 kg	
	?C??115R	???5??????	26000 kg	
	?C??115S	???5??????	26000 kg	
	?C??115S	???8??????	32500 kg	
	?C??115V	???8??????	32500 kg	
	?C??115W	???8??????	32500 kg	
	?C??115V	???9??????	35000 kg	
	?C??115W	???9??????	35000 kg	
	?C??115W	???B??????	36000 kg	

(*) con rimorchio con frenatura ad inerzia (3500 kg) o non frenato (750 kg)
(*) with trailer inertia braking system (3500 kg) or unbraked trailer (750 kg)



SCHEDA INFORMATIVA INFORMATION DOCUMENT

All n° 1.1.
Annex Nr
del 27.10.2020
of

Variante Variant	Versione Version	Massa Mass	1° asse 1 st axle	2° asse 2 nd axle	3° asse 3 rd axle	1° asse 1 st axle	2° asse 2 nd axle	3° asse 3 rd axle	T2	X _{min} (+)	L _{max}	S _{max}	1° asse 1 st axle	2° asse 2 nd axle	3° asse 3 rd axle	T2	X _{max} (+)	L _{min}	S _{min}	1° asse 1 st axle	2° asse 2 nd axle	3° asse 3 rd axle
		2.6	2.6.1.			2.9.			2.10.	2.4.1.8.	2.4.1.1.1.	2.4.1.5.	2.8.1.			2.10.	2.4.1.8.	2.4.1.1.2.	2.4.1.5.	2.8.1.		
I ?? ? 1 1 4 P	? P N ? 0 A D A P 2	6380	3290	1620	1470	5300	9500	9500	18000	-206	13054	4447	4500	9000	9000	18000	729	11183	2576	5300	8600	8600
I ?? ? 1 1 4 P	? P N ? 0 A D A P 2	6360	3400	1480	1480	5300	9500	9500	18000	-251	12565	3958	4500	9000	9000	18000	689	10685	2078	5300	8600	8600
I ?? ? 1 1 4 P	? P Q ? 0 A D A P 2	6230	3290	1470	1470	5300	10700	10700	18000	-211	13063	4456	4500	9000	9000	18000	723	11197	2590	5300	8600	8600
I ?? ? 1 1 4 P	? P Q ? 0 A D A P 2	6360	3400	1480	1480	5300	10700	10700	18000	-251	12565	3958	4500	9000	9000	18000	689	10685	2078	5300	8600	8600
I ?? ? 1 1 4 P	? S R ? 0 A D A P 2	6230	3290	1470	1470	5800	10900	10900	18000	-211	13063	4456	4500	9000	9000	18000	902	10837	2230	5800	8350	8350
I ?? ? 1 1 4 P	? S R ? 0 A D A P 2	6360	3400	1480	1480	5800	10900	10900	18000	-251	12565	3958	4500	9000	9000	18000	870	10322	1715	5800	8350	8350
I ?? ? 1 1 4 P	? T O ? 0 A D A P 2	6230	3290	1470	1470	6100	10000	10000	18000	-211	13063	4456	4500	9000	9000	18000	1010	10621	2014	6100	8200	8200
I ?? ? 1 1 4 P	? T O ? 0 A D A P 2	6360	3400	1480	1480	6100	10000	10000	18000	-251	12565	3958	4500	9000	9000	18000	979	10105	1498	6100	8200	8200
I ?? ? 1 1 4 P	? T S ? 0 A D A P 2	6230	3290	1470	1470	6100	11000	11000	18000	-211	13063	4456	4500	9000	9000	18000	1010	10621	2014	6100	8200	8200
I ?? ? 1 1 4 P	? T S ? 0 A D A P 2	6360	3400	1480	1480	6100	11000	11000	18000	-251	12565	3958	4500	9000	9000	18000	979	10105	1498	6100	8200	8200
I ?? ? 1 1 5 R	? P N ? 0 A D A P 2	6321	3385	1468	1468	5300	9500	9500	18000	-246	13135	4528	4500	9000	9000	18000	692	11257	2650	5300	8600	8600
I ?? ? 1 1 5 R	? P N ? 0 A D A P 2	6451	3495	1478	1478	5300	9500	9500	18000	-287	12637	4030	4500	9000	9000	18000	658	10746	2139	5300	8600	8600
I ?? ? 1 1 5 R	? P Q ? 0 A D A P 2	6321	3385	1468	1468	5300	10700	10700	18000	-246	13135	4528	4500	9000	9000	18000	692	11257	2650	5300	8600	8600
I ?? ? 1 1 5 R	? P Q ? 0 A D A P 2	6451	3495	1478	1478	5300	10700	10700	18000	-287	12637	4030	4500	9000	9000	18000	658	10746	2139	5300	8600	8600
I ?? ? 1 1 5 R	? S R ? 0 A D A P 2	6321	3385	1468	1468	5800	10900	10900	18000	-246	13135	4528	4500	9000	9000	18000	873	10896	2289	5800	8350	8350
I ?? ? 1 1 5 R	? S R ? 0 A D A P 2	6451	3495	1478	1478	5800	10900	10900	18000	-287	12637	4030	4500	9000	9000	18000	840	10382	1775	5800	8350	8350
I ?? ? 1 1 5 R	? T O ? 0 A D A P 2	6321	3385	1468	1468	6100	10000	10000	18000	-246	13135	4528	4500	9000	9000	18000	982	10679	2072	6100	8200	8200
I ?? ? 1 1 5 R	? T O ? 0 A D A P 2	6451	3495	1478	1478	6100	10000	10000	18000	-287	12637	4030	4500	9000	9000	18000	950	10163	1556	6100	8200	8200
I ?? ? 1 1 5 R	? T S ? 0 A D A P 2	6321	3385	1468	1468	6100	11000	11000	18000	-246	13135	4528	4500	9000	9000	18000	982	10679	2072	6100	8200	8200
I ?? ? 1 1 5 R	? T S ? 0 A D A P 2	6451	3495	1478	1478	6100	11000	11000	18000	-287	12637	4030	4500	9000	9000	18000	950	10163	1556	6100	8200	8200
I ?? ? 1 1 5 S	? P N ? 0 A D A P 2	6380	3410	1485	1485	5300	9500	9500	18000	-255	13152	4545	4500	9000	9000	18000	686	11270	2663	5300	8600	8600
I ?? ? 1 1 5 S	? P N ? 0 A D A P 2	6510	3520	1495	1495	5300	9500	9500	18000	-296	12654	4047	4500	9000	9000	18000	651	10760	2153	5300	8600	8600
I ?? ? 1 1 5 S	? P Q ? 0 A D A P 2	6380	3410	1485	1485	5300	10700	10700	18000	-255	13152	4545	4500	9000	9000	18000	686	11270	2663	5300	8600	8600
I ?? ? 1 1 5 S	? P Q ? 0 A D A P 2	6510	3520	1495	1495	5300	10700	10700	18000	-296	12654	4047	4500	9000	9000	18000	651	10760	2153	5300	8600	8600
I ?? ? 1 1 5 S	? S R ? 0 A D A P 2	6380	3410	1485	1485	5800	10900	10900	18000	-255	13152	4545	4500	9000	9000	18000	867	10907	2300	5800	8350	8350
I ?? ? 1 1 5 S	? S R ? 0 A D A P 2	6510	3520	1495	1495	5800	10900	10900	18000	-296	12654	4047	4500	9000	9000	18000	834	10394	1787	5800	8350	8350
I ?? ? 1 1 5 S	? T O ? 0 A D A P 2	6380	3410	1485	1485	6100	10000	10000	18000	-255	13152	4545	4500	9000	9000	18000	976	10690	2083	6100	8200	8200
I ?? ? 1 1 5 S	? T O ? 0 A D A P 2	6510	3520	1495	1495	6100	10000	10000	18000	-296	12654	4047	4500	9000	9000	18000	944	10174	1567	6100	8200	8200
I ?? ? 1 1 5 S	? T S ? 0 A D A P 2	6380	3410	1485	1485	6100	11000	11000	18000	-255	13152	4545	4500	9000	9000	18000	976	10690	2083	6100	8200	8200
I ?? ? 1 1 5 S	? T S ? 0 A D A P 2	6510	3520	1495	1495	6100	11000	11000	18000	-296	12654	4047	4500	9000	9000	18000	944	10174	1567	6100	8200	8200
I ?? ? 1 1 5 V	? P N ? 0 A D A P 2	6480	3480	1500	1500	5300	9500	9500	18000	-281	13203	4596	4500	9000	9000	18000	665	11313	2706	5300	8600	8600
I ?? ? 1 1 5 V	? P N ? 0 A D A P 2	6610	3590	1510	1510	5300	9500	9500	18000	-323	12707	4100	4500	9000	9000	18000	630	10803	2196	5300	8600	8600
I ?? ? 1 1 5 V	? P Q ? 0 A D A P 2	6480	3480	1500	1500	5300	10700	10700	18000	-281	13203	4596	4500	9000	9000	18000	665	11313	2706	5300	8600	8600
I ?? ? 1 1 5 V	? P Q ? 0 A D A P 2	6610	3590	1510	1510	5300	10700	10700	18000	-323	12707	4100	4500	9000	9000	18000	630	10803	2196	5300	8600	8600
I ?? ? 1 1 5 V	? S R ? 0 A D A P 2	6480	3480	1500	1500	5800	10900	10900	18000	-281	13203	4596	4500	9000	9000	18000	847	10948	2341	5800	8350	8350
I ?? ? 1 1 5 V	? S R ? 0 A D A P 2	6610	3590	1510	1510	5800	10900	10900	18000	-323	12707	4100	4500	9000	9000	18000	814	10435	1828	5800	8350	8350
I ?? ? 1 1 5 V	? T O ? 0 A D A P 2	6480	3480	1500	1500	6100	10000	10000	18000	-281	13203	4596	4500	9000	9000	18000	957	10729	2122	6100	8200	8200
I ?? ? 1 1 5 V	? T O ? 0 A D A P 2	6610	3590	1510	1510	6100	10000	10000	18000	-323	12707	4100	4500	9000	9000	18000	924	10214	1607	6100	8200	8200
I ?? ? 1 1 5 V	? T S ? 0 A D A P 2	6480	3480	1500	1500	6100	11000	11000	18000	-281	13203	4596	4500	9000	9000	18000	957	10729	2122	6100	8200	8200
I ?? ? 1 1 5 V	? T S ? 0 A D A P 2	6610	3590	1510	1510	6100	11000	11000	18000	-323	12707	4100	4500	9000	9000	18000	924	10214	1607	6100	8200	8200
I ?? ? 1 1 5 W	? P N ? 0 A D A P 2	6520	3470	1630	1420	5300	9500	9500	18000	-275	13193	4586	4500	9000	9000	18000	670	11302	2695	5300	8600	8600
I ?? ? 1 1 5 W	? P N ? 0 A D A P 2	6650	3580	1640	1430	5300	9500	9500	18000	-317	12697	4090	4500	9000	9000	18000	635	10792	2185	5300	8600	8600
I ?? ? 1 1 5 W	? P Q ? 0 A D A P 2	6520	3470	1630	1420	5300	10700	10700	18000	-275	13193	4586	4500	9000	9000	18000	670	11302	2695	5300	8600	8600
I ?? ? 1 1 5 W	? P Q ? 0 A D A P 2	6650	3580	1640	1430	5300	10700	10700	18000	-317	12697	4090	4500	9000	9000	18000	635	10792	2185	5300	8600	8600
I ?? ? 1 1 5 W	? S R ? 0 A D A P 2	6520	3470	1630	1420	5800	10900	10900	18000	-275	13193	4586	4500	9000	9000	18000	853	10936	2329	5800	8350	8350
I ?? ? 1 1 5 W	? S R ? 0 A D A P 2	6650	3580	1640	1430	5800	10900	10900	18000	-317	12697	4090	4500	9000	9000	18000	819	10423	1816	5800	8350	8350
I ?? ? 1 1 5 W	? T O ? 0 A D A P 2	6520	3470	1630	1420	6100	10000	10000	18000	-275	13193	4586	4500	9000	9000	18000	963	10716	2109	6100	8200	8200
I ?? ? 1 1 5 W	? T O ? 0 A D A P 2	6650	3580	1640	1430	6100	10000	10000	18000	-317	12697	4090	4500	9000	9000	18000	930	10202	1595	6100	8200	8200
I ?? ? 1 1 5 W	? T S ? 0 A D A P 2	6520	3470	1630	1420	6100	11000	11000	18000	-275	13193	4586	4500	9000	9000	18000	963	10716	2109	6100	8200	8200
I ?? ? 1 1 5 W	? T S ? 0 A D A P 2	6650	3580	1640	1430	6100	11000	11000	18000	-317	12697	4090	4500	9000	9000	18000	930	10202	1595	6100	8200	8200

(+): Posizioni estreme ammissibili possibili del baricentro del carico utile (dichiarate dal costruttore) rispetto al 2° asse.

Extreme permissible possible positions of the centre of gravity of the payload (declared by manufacturer), relative to 2nd axle.

All. 1.1.: 1 / 1

E24*13R10/05*0103*01



SCHEDA INFORMATIVA INFORMATION DOCUMENT

All n°
Annex Nr
del
of

2

27.10.2020

Punto Item	Variante Variant	Versione Version	Descrizione Description
3.1.1.	?????4P	??????????	F4AFE411C*N
	?????5R	??????????	F4AFE611A*N
	?????5S	??????????	F4AFE611E*N
	?????5V	??????????	F4AFE611D*N
	?????5W	??????????	F4AFE611K*N
3.2.1.9.	?????4P	??????????	2800 ± 50 oppure / or 2500 ± 50 min ⁻¹
	?????5R	??????????	2800 ± 50 min ⁻¹
	?????5S	??????????	2800 ± 50 min ⁻¹
	?????5V	??????????	2800 ± 50 min ⁻¹
	?????5W	??????????	2800 ± 50 min ⁻¹
3.2.18.	?????4P	??????????	152 kW / 2500 min ⁻¹
	?????5R	??????????	162 kW / 2500 min ⁻¹
	?????5S	??????????	185 kW / 2500 min ⁻¹
	?????5V	??????????	235 kW / 2500 min ⁻¹
	?????5W	??????????	207 kW / 2500 min ⁻¹



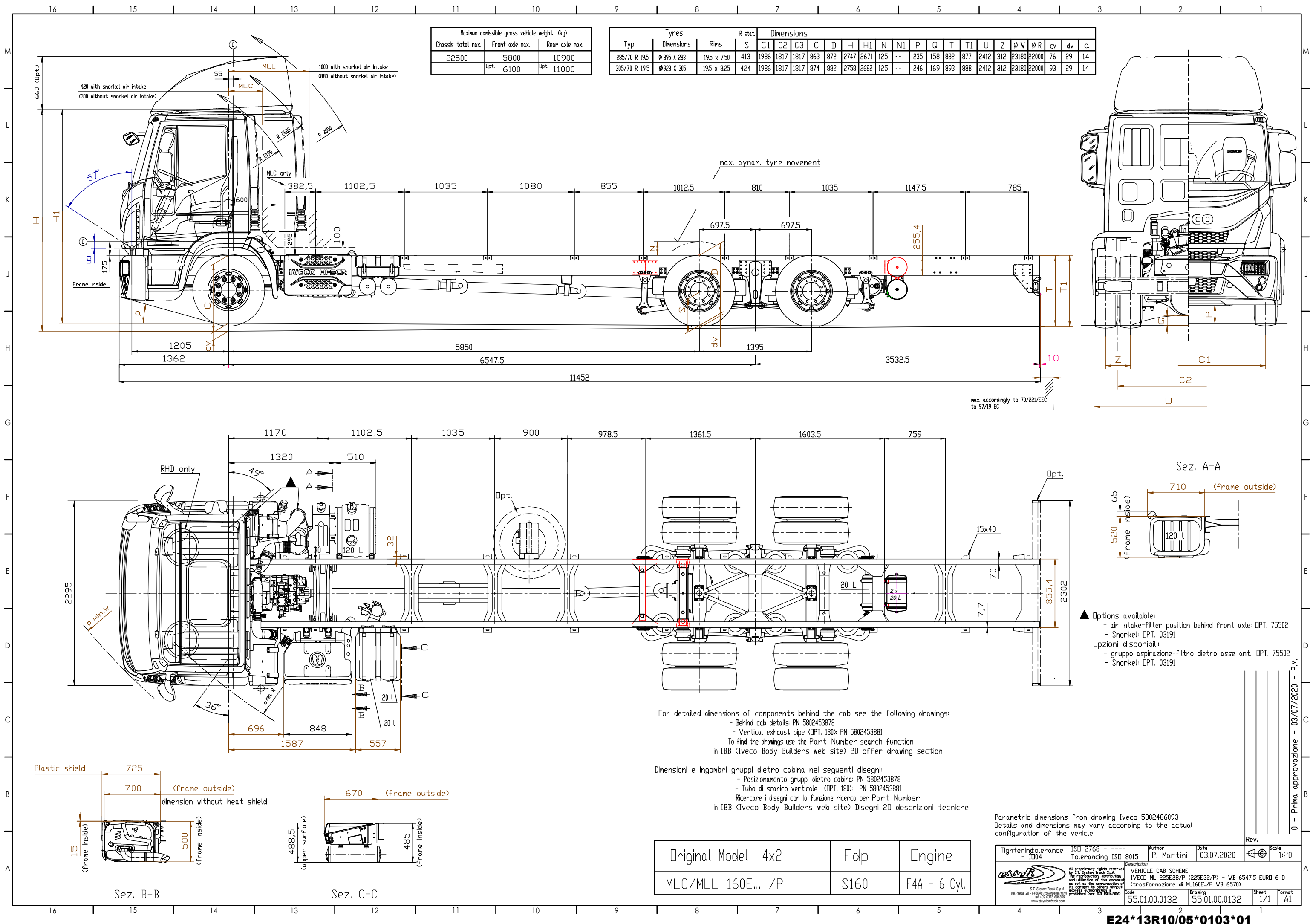
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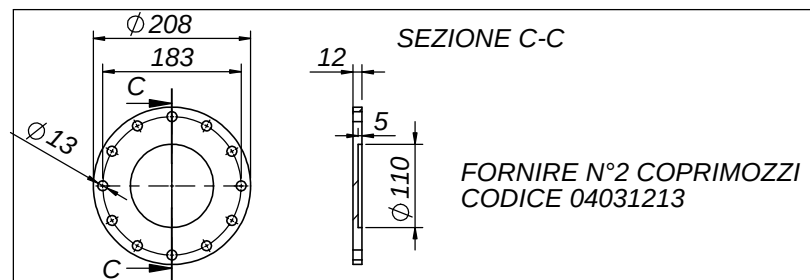
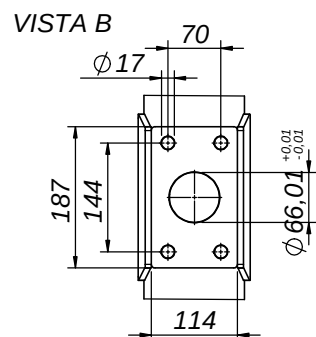
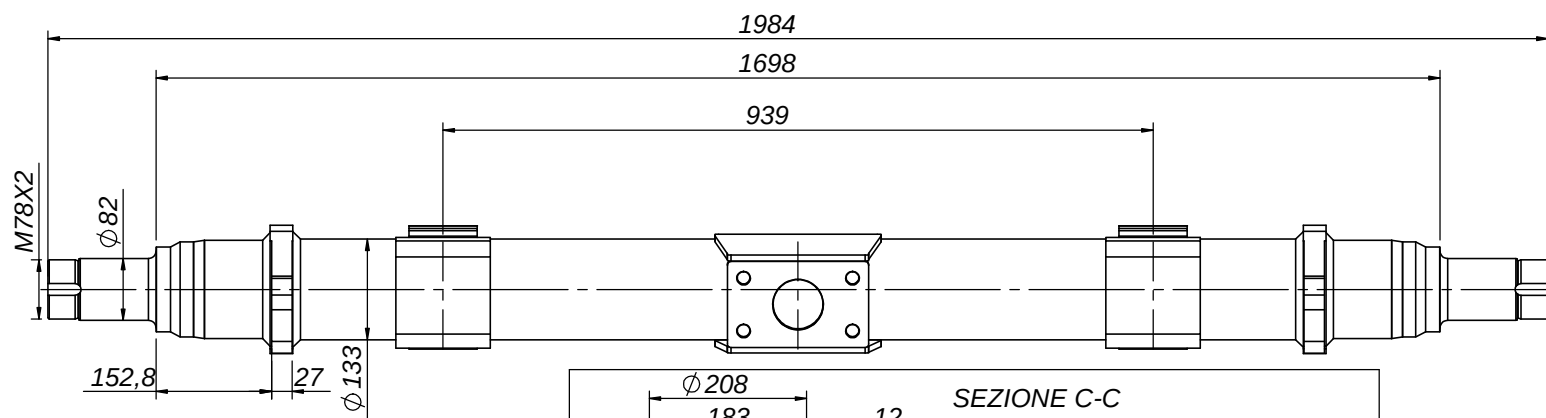
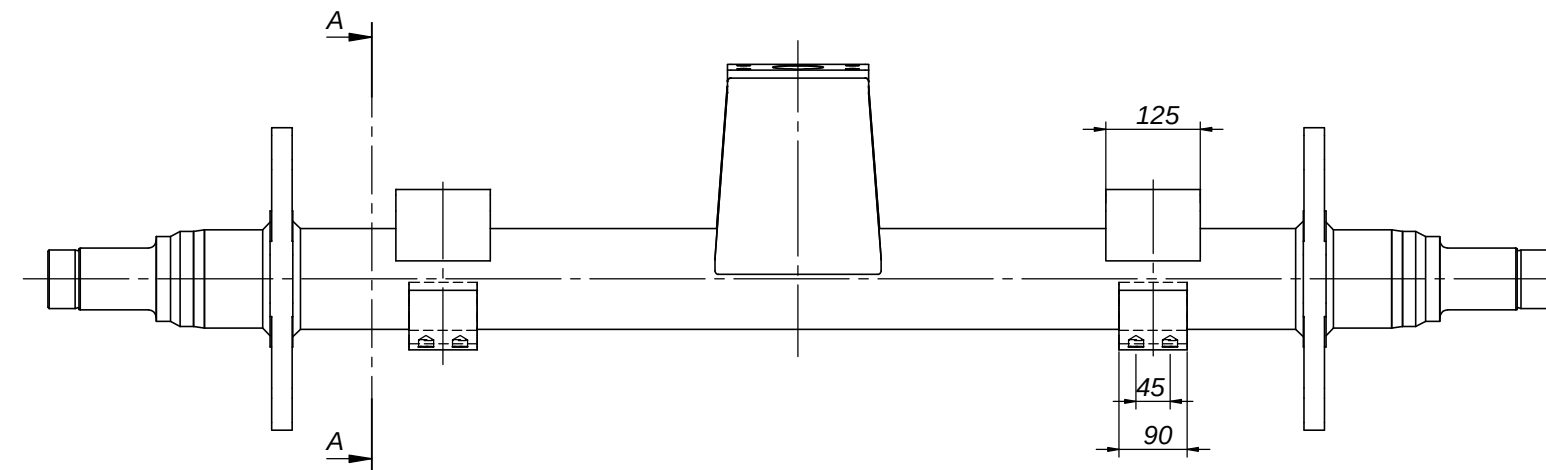
All n° **3**
Annex Nr
del **27.10.2020**
of

Punto Item	Variante Variant	Versione Version	Descrizione Description	Dimensione Size	Indice di carico minimo Load capacity index	Indice di velocità Speed index	Cerchio Rim size	Campanatura Offset(s)	Pressione Pressure
6.6.1.1.1.	?????????	?P?????????		285/70 R19,5	142 / --	G o/or J (*)	19,5 x 7,50	155 / 142	8,5 bar
				305/70 R19,5	142 / --	G o/or J (*)	19,5 x 8,25	170 / 157	8,5 bar
	?????????	?S?????????		285/70 R19,5	145 / --	G o/or J (*)	19,5 x 7,50	155 / 142	8,5 bar
				305/70 R19,5	145 / --	G o/or J (*)	19,5 x 8,25	170 / 157	8,5 bar
	?????????	?T?????????		285/70 R19,5	147 / --	G o/or J (*)	19,5 x 7,50	155 / 142	8,5 bar
				305/70 R19,5	147 / --	G o/or J (*)	19,5 x 8,25	170 / 157	8,5 bar
6.6.1.1.2.	?????????	??N?????????		285/70 R19,5	-- / 139	G o/or J (*)	19,5 x 7,50	155 / 142	8,5 bar
				305/70 R19,5	-- / 139	G o/or J (*)	19,5 x 8,25	170 / 157	8,5 bar
	?????????	??O?????????		285/70 R19,5	-- / 140	G o/or J (*)	19,5 x 7,50	155 / 142	8,5 bar
				305/70 R19,5	-- / 140	G o/or J (*)	19,5 x 8,25	170 / 157	8,5 bar
	?????????	??Q?????????		285/70 R19,5	-- / 143	G o/or J (*)	19,5 x 7,50	155 / 142	8,5 bar
				305/70 R19,5	-- / 143	G o/or J (*)	19,5 x 8,25	170 / 157	8,5 bar
	?????????	??R?????????		285/70 R19,5	-- / 143	G o/or J (*)	19,5 x 7,50	155 / 142	8,5 bar
				305/70 R19,5	-- / 143	G o/or J (*)	19,5 x 8,25	170 / 157	8,5 bar
	?????????	??S?????????		285/70 R19,5	-- / 144	G o/or J (*)	19,5 x 7,50	155 / 142	8,5 bar
				305/70 R19,5	-- / 144	G o/or J (*)	19,5 x 8,25	170 / 157	8,5 bar
	?????????	??N?????????		285/70 R19,5	-- / 139	G o/or J (*)	19,5 x 7,50	155 / 142	8,5 bar
				305/70 R19,5	-- / 139	G o/or J (*)	19,5 x 8,25	170 / 157	8,5 bar
6.6.1.1.3.	?????????	??O?????????		285/70 R19,5	-- / 140	G o/or J (*)	19,5 x 7,50	155 / 142	8,5 bar
				305/70 R19,5	-- / 140	G o/or J (*)	19,5 x 8,25	170 / 157	8,5 bar
	?????????	??Q?????????		285/70 R19,5	-- / 143	G o/or J (*)	19,5 x 7,50	155 / 142	8,5 bar
				305/70 R19,5	-- / 143	G o/or J (*)	19,5 x 8,25	170 / 157	8,5 bar
	?????????	??R?????????		285/70 R19,5	-- / 143	G o/or J (*)	19,5 x 7,50	155 / 142	8,5 bar
				305/70 R19,5	-- / 143	G o/or J (*)	19,5 x 8,25	170 / 157	8,5 bar
	?????????	??S?????????		285/70 R19,5	-- / 144	G o/or J (*)	19,5 x 7,50	155 / 142	8,5 bar
				305/70 R19,5	-- / 144	G o/or J (*)	19,5 x 8,25	170 / 157	8,5 bar

(*) G con limitatore di velocità tarato a 90 km/h
with speed limiting device set to 90 km/h

J con limitatore di velocità tarato a 100 km/h
with speed limiting device set to 100 km/h





FORNIRE N°2 COPRIMOZZI
CODICE 04031213

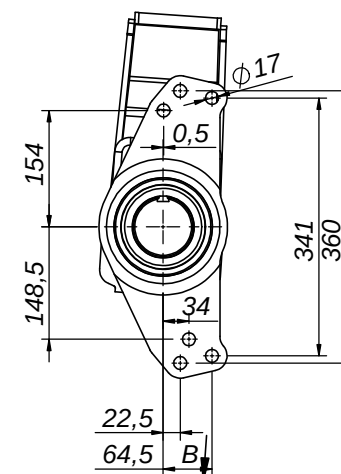
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FASE DELL'ASSEMBLAMENTO.

□ QUOTE DA CONTROLLARE NELLA
FASE DI CONTROLLO FINALE.

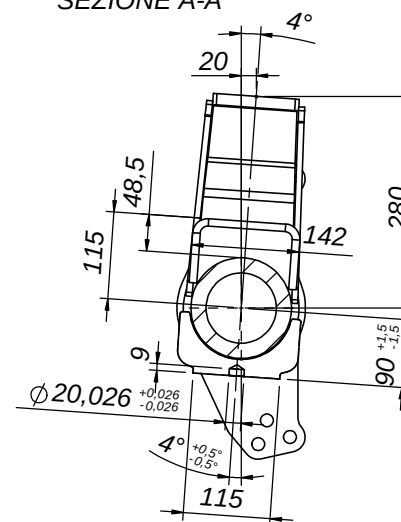
PERSONALIZZAZIONI

-DADI RUOTA:-
-LEVE FRENO:-
-BRAKE CHAMBER:-
-CIL. BLOCCAGGIO:-
-COPRIMOZZO:-

Assall Tecma		VERONA ITALY	
AXLE TYPE	BRAKE TYPE		
MODEL	S08F111960----		
LOAD CAPACITY	STAT. 11000	kg	TECH. kg
MAX SPEED	105	km/h	SERIE NUMBER
N°VERBALE DEL FRENO - N° TEST REPORT SECONDO DIRETT. 71/320/CEE - 98/12/CE			



SEZIONE A-A

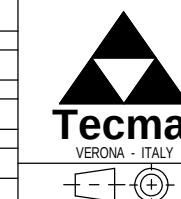


COD. INTERNO:182560176

QUOTE SENZA INDICAZIONE DI TOLLERANZA GRADO DI PRECISIONE MEDIO
NORMA UNI EN 22768/1

MATERIALE		STATO DI FORNITURA	TRATTAMENTO
--		--	--
DISegnato	CONTROLLATO	MASSA (Kg)	CODICE GREZZO
ET	SC	156,38	--
DATA	SCALA	FOGLIO	
28/08/2014	1:10	A4	

DESCRIZIONE: **AFN 11T FRENO DISCO GEMELLATO**



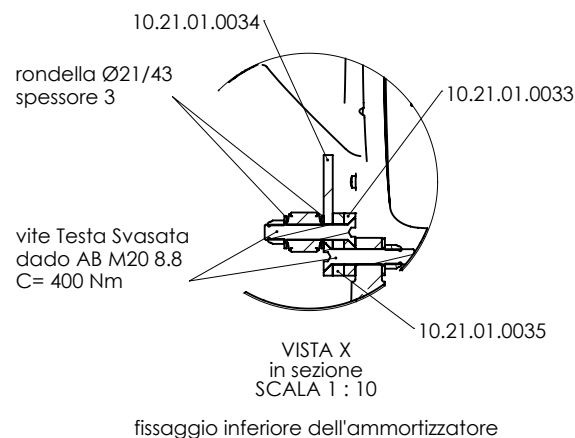
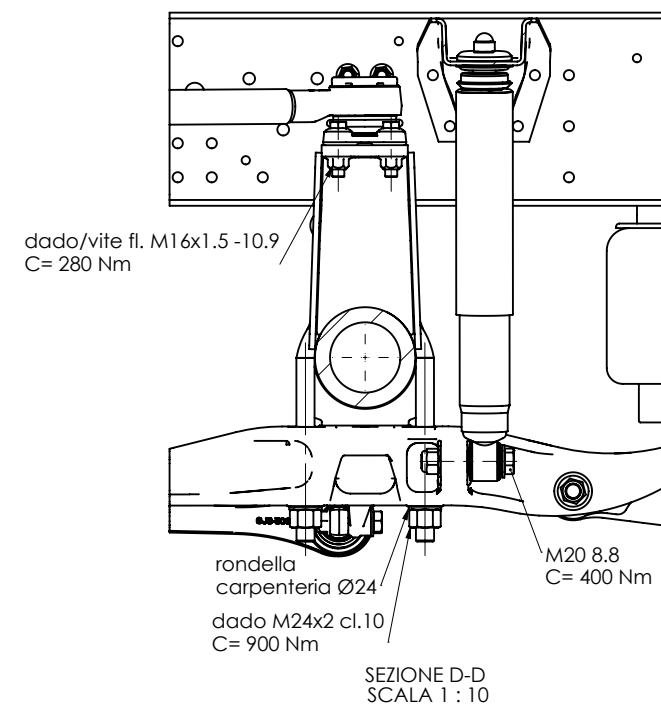
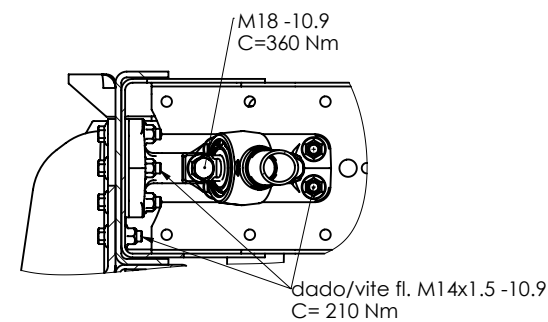
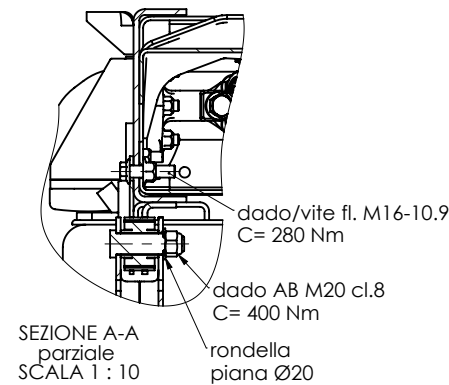
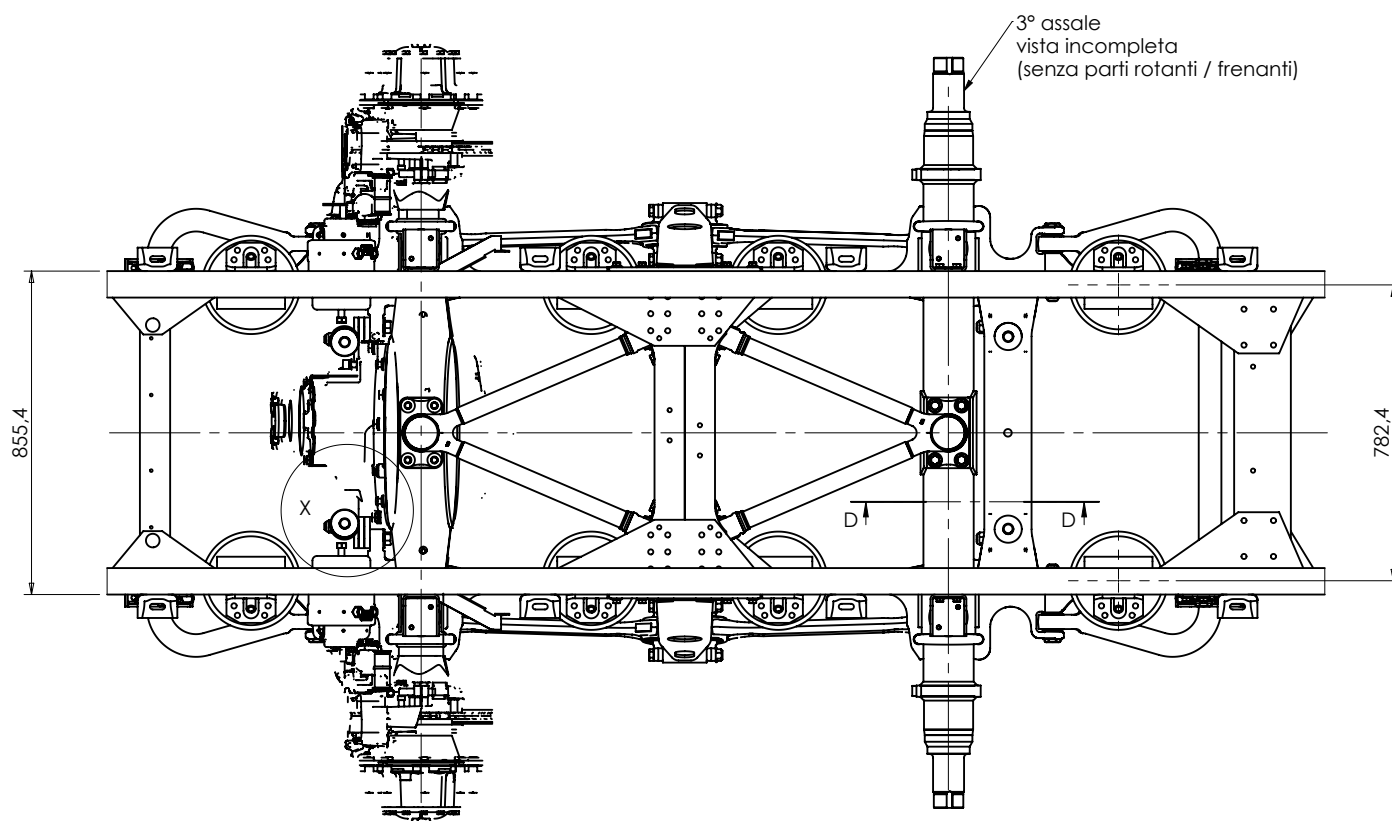
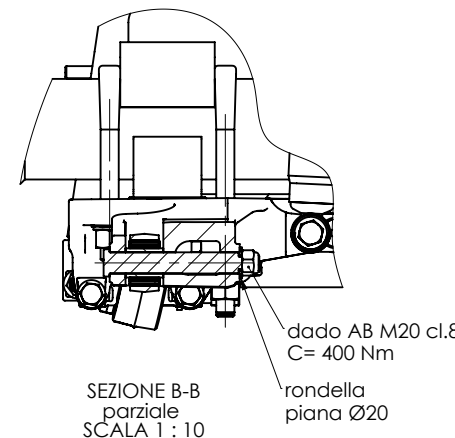
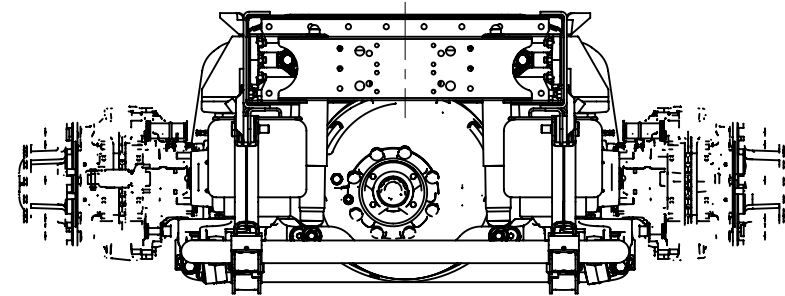
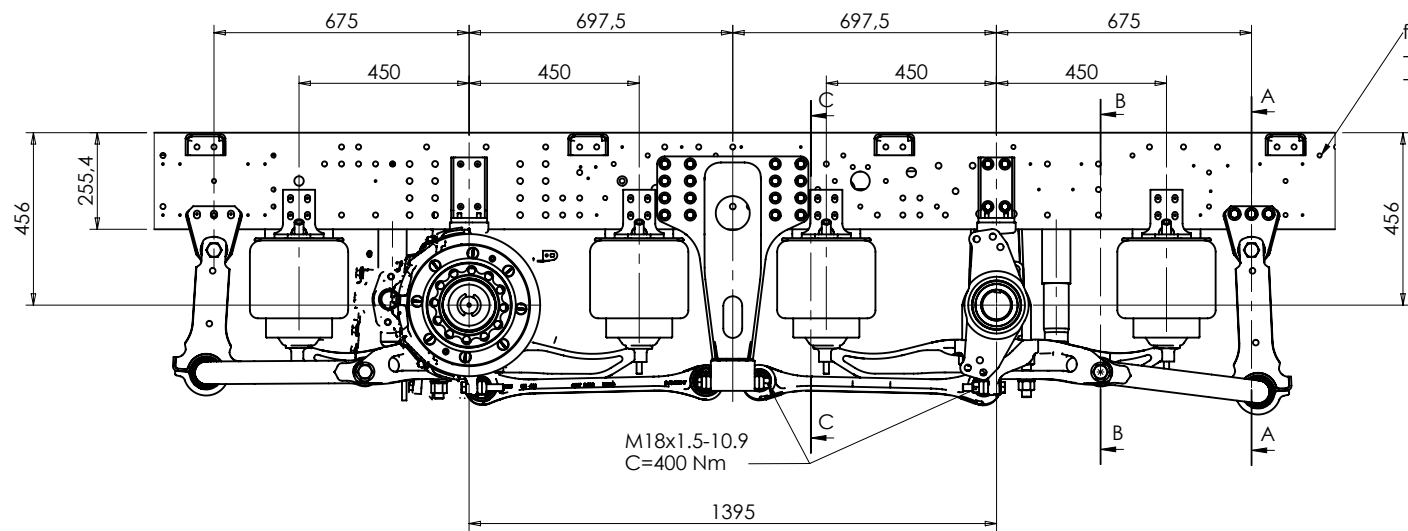
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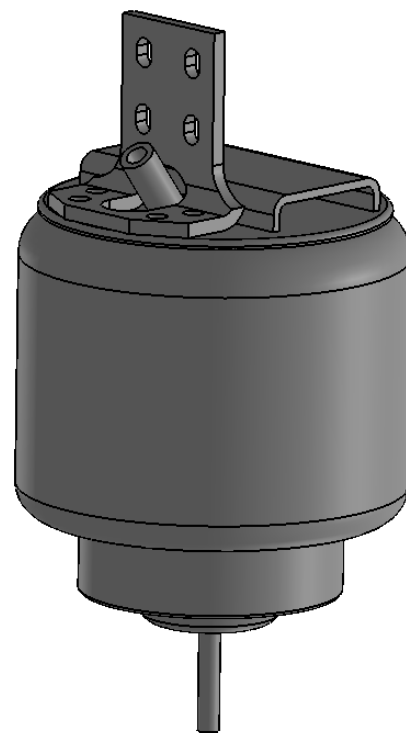
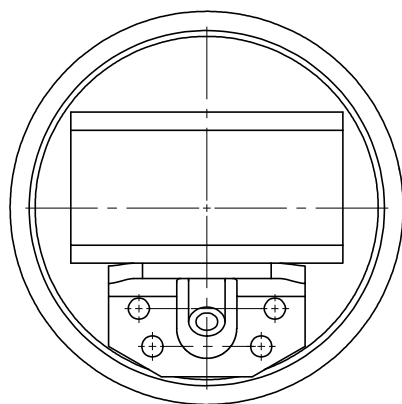
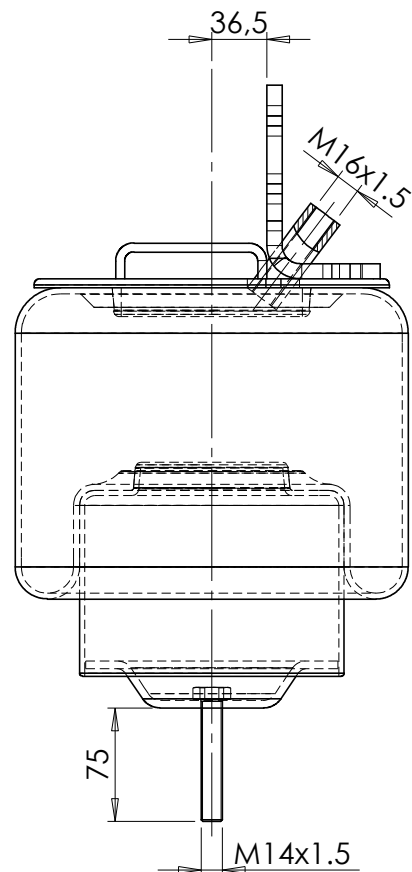
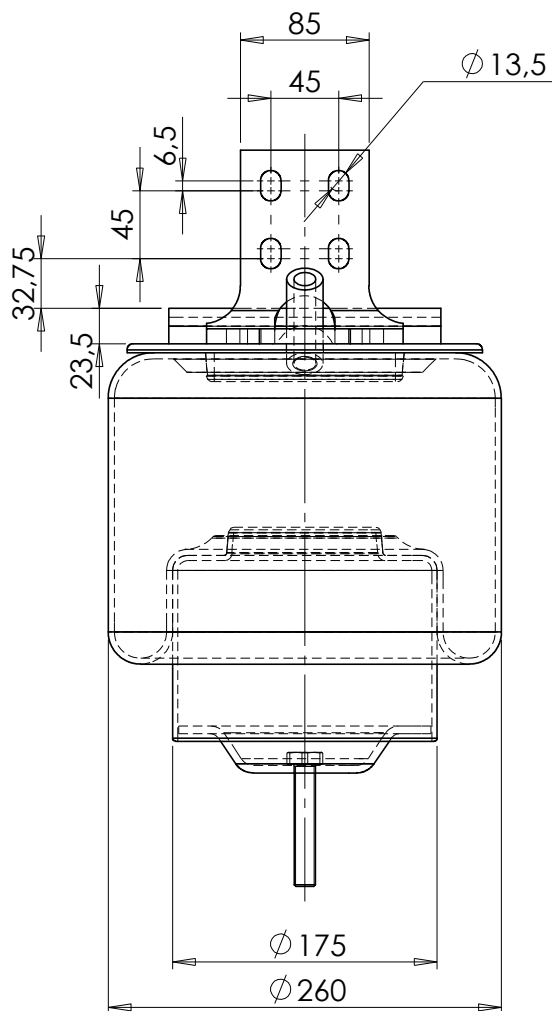
REG.PERNO DEL FUSO	-	REGISTR. CONVERGENZA	-	ISTRUZIONE MONT.MOZZI	-	TORNITURA FRENI	-	LUBRIFICAZIONE MOZZI	-	REGISTRAZIONE GIOCO CUSCIN.	-
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PROPRIETÀ DELLA DITTA TECMA S.R.L. SENZA AUTORIZZAZIONE DELLA STESSA IL PRESENTE DISEGNO NON POTRÀ ESSERE UTILIZZATO PER LA COSTRUZIONE DELL'OGGETTO RAPPRESENTATO NÉ VENIRE COMUNICATO A TERZO O RIPRODOTTO. LA SOCIETÀ PROPRIETARIA TUTELA I PROPRII DIRITTI A NORMA DI LEGGE. ALL PROPRIETÀ RISERVATA. THIS DRAWING IS NOT BE REPRODUCED FOR MANUFACTURE OF THE COMPONENT OR UNIT HEREIN ILLUSTRATED AND MUST NOT BE RELEASED TO OTHER WRITTEN CONSENT. ANY VIOLATION WILL BE PROSECUTED.

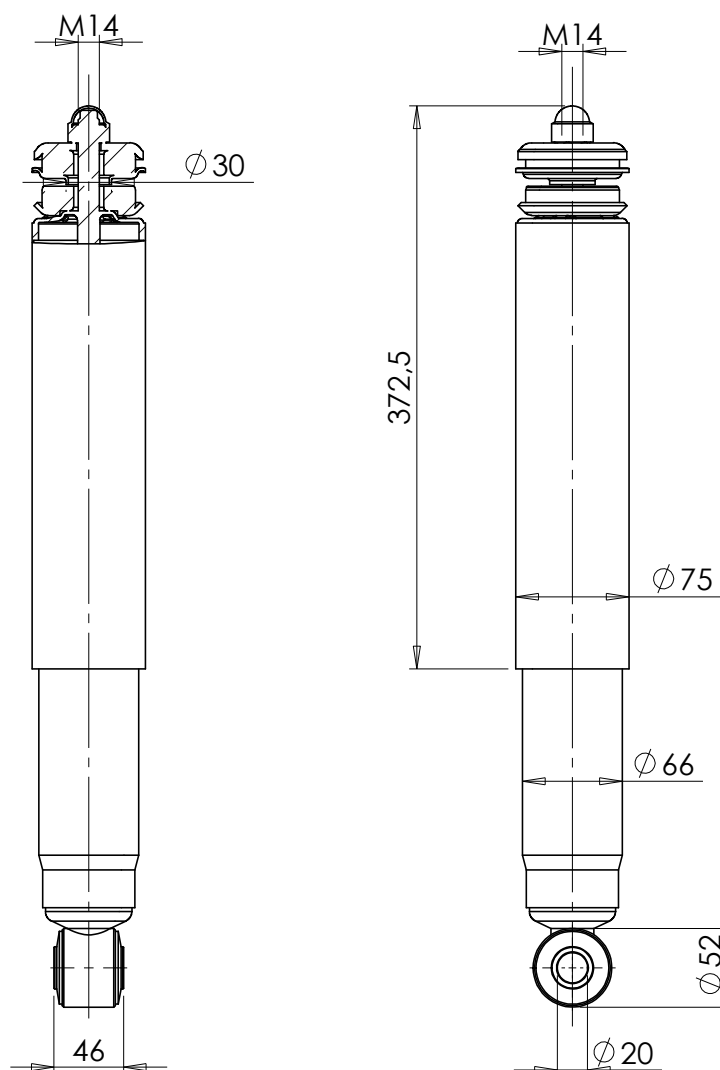
E24*13R10.05*0103*01



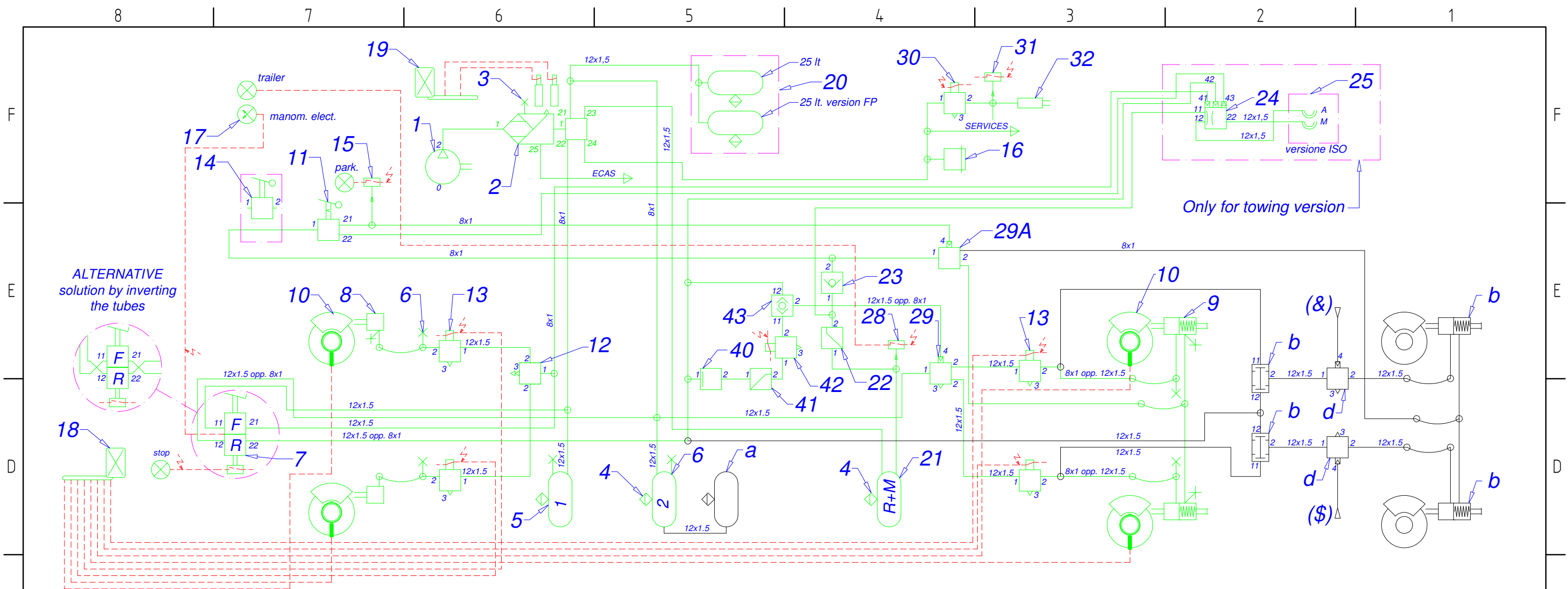
 	Disegnato con : Modificare solo con: Drawing with: Modify only with:	 SolidWorks	Formato disegno Format Drawing A3 UNI 936	Materiale Material	Trattamento termico Heat treatment --	Finitura superficiale Surface finishing --	Massa kg Weight kg 743,18	
Quote senza indicazione di tolleranza secondo tabella UNI EN 22768/1, con grado di precisione MEDIO Measures without tolerance according to indication according to UNI EN 22768/1, with a degree of precision MEDIUM			Unità di misura Unit of measure lineari - linear: mm angoli: gradi sessagesimali angles: sexagesimal degrees	Disegnato da Drawing by P.MARTINI	Controllato da Checked by P.Martini	Data Date 28/08/2014	Scala Scale 1:20	
  S.T. System Truck s.r.l. via Cascina Verde, 9 I 37069 Villafranca di Verona (VR) tel. +39 0456305861/64 - fax +39 0457978865/9100 www.stsystemtruck.com --- info@stsystemtruck.com			Disegno di proprietà della S.T.System Truck s.r.l. Vietata la riproduzione non autorizzata. Property of S.T.System Truck s.r.l. Reproduction not permitted, all rights reserved.	Descrizione / Description SOSPENSIONE POST. PNEUM. ASSE FISSO - ML 160E28P - ALL. ML225E28P 6X2 3° ASSE GEMELLATO FISSO		Codice / Code 10.01.10.0009	Disegno / Drawing E24*13R18/05*0103*01	Foglio Sheet 1 / 1



 	Disegnato con : Modificare solo con: Drawing with: Modify only with:		Formato disegno Format Drawing A4 UNI 936	Materiale Material	Trattamento termico Heat treatment --	Finitura superficiale Surface finishing --	Massa kg Weight kg 2,21
Quote senza indicazione di tolleranza secondo tabella UNI EN 22768/1, con grado di precisione MEDIO Measures without tolerance according to indication according to UNI EN 22768/1, with a degree of precision MEDIUM			Unità di misura Unit of measure lineari - linear: mm angoli: gradi sessagesimali angles: sexagesimal degrees	Disegnato da Drawing by P.MARTINI	Controllato da Checked by P.Martini	Data Date 26/08/2014	Scala Scale 1:5
  S.T. System Truck s.r.l. via Cascina Verde, 9 I 37069 Villafranca di Verona (VR) tel. +39 0456305861/64 - fax +39 0457978865/9100 www.stsystemtruck.com --- info@stsystemtruck.com			Disegno di proprietà della S.T.System Truck s.r.l. Vietata la riproduzione non autorizzata. Property of S.T.System Truck s.r.l. Reproduction not permitted, all rights reserved.	Descrizione / Description MOLLA PNEUMATICA DIAPRESS COMPLETA - SOSPENSIONE IVECO ML --			
				Codice / Code 98490464	Disegno / Drawing E24*13519/0510103*01 99.99.05.1132		Foglio Sheet 1 / 1



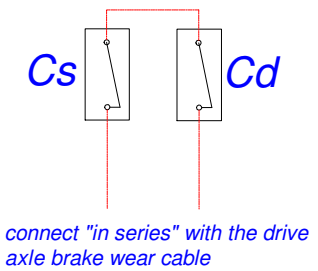
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Quote senza indicazione di tolleranza secondo tabella UNI EN 22768/1, con grado di precisione MEDIO Measures without tolerance according to indication according to UNI EN 22768/1, with a degree of precision MEDIUM			Unità di misura Unit of measure lineari - linear: mm angoli: gradi sessagesimali angles: sexagesimal degrees	Disegnato da Drawing by P.MARTINI	Controllato da Checked by P.Martini	Data Date 26/08/2014	Scala Scale 1:5
 S.T. System Truck s.r.l. via Cascina Verde, 9 I 37069 Villafranca di Verona (VR) tel. +39 0456305861/64 - fax +39 0457978865/9100 www.stssystemtruck.com --- info@stssystemtruck.com			Disegno di proprietà della S.T.System Truck s.r.l. Vietata la riproduzione non autorizzata. Property of S.T.System Truck s.r.l. Reproduction not permitted, all rights reserved.	Descrizione / Description AMMORTIZZATORE PER SOSPENSIONE PNEUMATICA IVECO ML (ASSE MOTORE) --		Foglio Sheet	
				Codice / Code 504147623	Disegno / Drawing E24*13519/0510103*01 99.99.05.1134	1 / 1	



- LEGENDA**
- 1 - Single cylinder compressor 225 cc (optional 359 cc).
 - 2 - A.P.U. Air dryer with regulator 11 bar - 4 way protection valve 7.5/6.5 bar.
 - 3 - Pressure control point.
 - 4 - Manual spurge valve.
 - 5 - Air tank 1 - 25 l.
 - 6 - Air tank 2 - 25 l.
 - 7 - Pedal brake command - autolimited 7.6 ± 0.3 bar.
 - 8 - Brake cylinder 22".
 - 9 - Brake cylinder, combined with spring 18/27".
 - 10 - Disc brake Ø377 mm, braking surface 301 cm2 per wheel.
 - 11 - Hand brake with spring command - autolimited 8.5 bar.
 - 12 - Rapid release valve.
 - 13 - Electropneumatic valve for A.B.S.
 - 14 - Safety valve for parking brake (optional).
 - 15 - Low pressure switches - 6.5 bar.
 - 16 - Safety valve for services (optional).
 - 17 - Electric manometer low air pressure indicator - 6.5 bar.
 - 18 - Central control unit A.B.S.
 - 19 - M.E.T. (modulo elettronico telaio).
 - 21 - Air tank trailer (+ spring brake) 15 l.
 - 22 - Pressure reduction trailer section - 8.5 bar.
 - 23 - Check valve.
 - 24 - Trailer brake control servo-distributor - predominance 0.5 bar.
 - 25 - Trailer half coupling - ISO.
 - 28 - Low pressure switch - 6.5 bar.
 - 29 - Servo-distributor lever.
 - 29/A - Servo-distributor lever for parking.

- 30 - Engine braking control.
 - 31 - Pressure switch to command electric engine brake.
 - 32 - Operating cylinder engine braking.
 - 40 - Air intake valve with out return (opening 7 -0.3 bar)
 - 41 - Pressure reduction valve 8.5 bar.
 - 42 - Electropneumatic valve for ESP - ASR - BPA.
 - 43 - Double stop valve - utilises Pmax.
- Added components for 6x2 conversion:**
- a - Air tank 20 l.
 - b - Circuit selector - utilises p min.
 - c - Brake cylinder, combined with spring 18/27"
 - d - Relay valve

BRAKE WEAR CONTACT



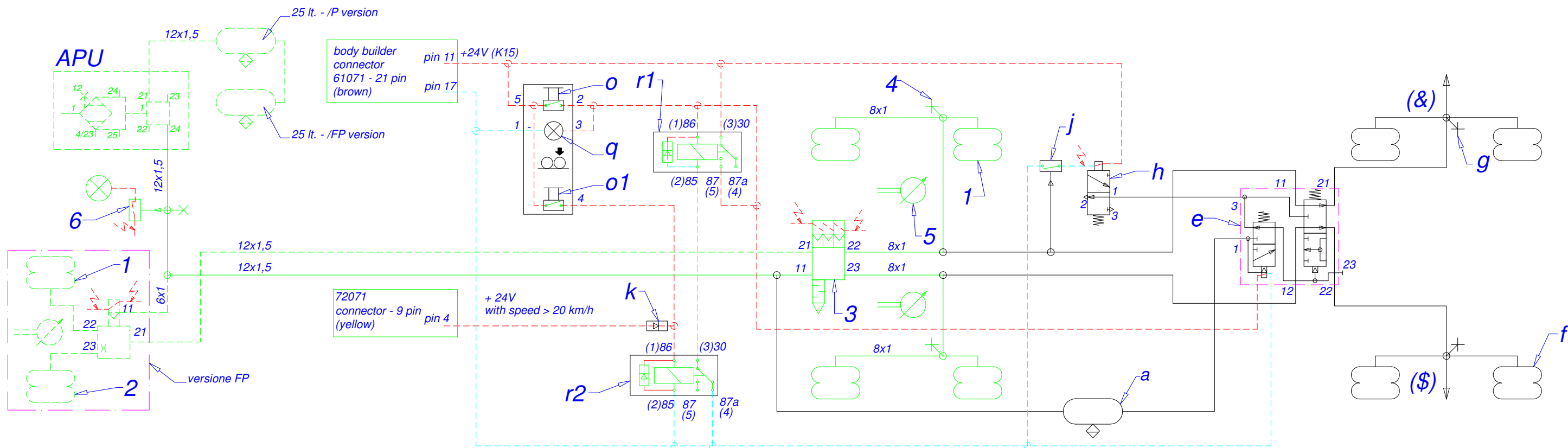
- LEGEND**
- Cs - CONTACT ON LEFT CALIPER (OPEN WITH WORN PADS)
 - Cd - CONTACT ON RIGHT CALIPER (OPEN WITH WORN PADS)

Pneumatic suspension & services layout drawing on sheet 2/2

Tightening tolerance - I004	ISO 2768 - ---- Tolerancing ISO 8015	Author F.MARTINI	Date 01/07/2020	Scale 1:1
 S.T. System Truck S.p.A. via Paesa, 28 - I 46048 Roverbella (MN) tel. +39 0376 696809 www.sftsystemtruck.com All proprietary rights reserved by S.T. System Truck S.p.A. The reproduction, distribution and utilisation of this document as well as the communication of its content to others without express authorisation is prohibited (see ISO 16016:2016) Description PNEUMATIC LAYOUT - IVECO ML225E /P 6X2P - 3rd TWIN WHEELS REAR AXLE WITH LOAD TRANSFER FUNCTION				
Code 25.01.05.0076	Drawing 25.01.05.0076	Sheet 1/2	Format A3	

F
E
D
C
B
A

F
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D
C
B
A



LEGENDA

- 1 - Suspension air bellow
- 2 - ECAS modulator - front axle
- 3 - ECAS modulator - drive axle
- 4 - Pressure take-off
- 5 - Level sensor
- 6 - Pressure switch (6.6 ± 0.2 bar)

Added components for 6x2 conversion:

- a - Air tank, 20 lt.
- e - Double section electrovalve (load transfer activation) (+)
- f - 3rd axle air bellow
- g - Pressure take-off
- h - N.O. electrovalve (load transfer control) (+)
- j - N.O. pressure switch (load transfer control) - 8.0 bar (+)
- k - Diode
- o - N.O. momentary switch for load transfer activation (+)
- o1 - N.O. momentary switch for load transfer deactivation (OPTIONAL) (+)
- q - Load transfer activation light
- r1 - Relay (load transfer activation)
- r2 - Relay (load transfer deactivation)

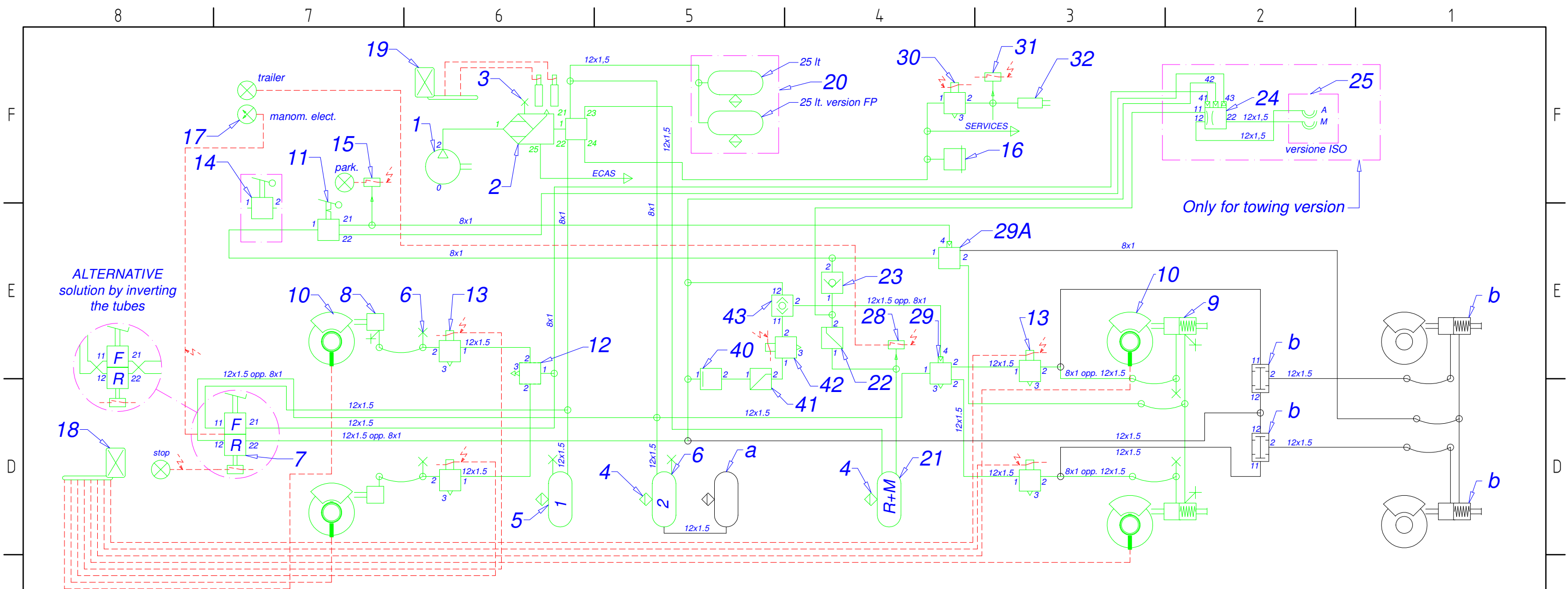
(+) When the switch "o" is pressed, the relay "r1" is activated (self-retained) and the solenoid valve "e" is powered. The air bellows of the 3rd axle is discharged through the solenoid valve "h". The pressure switch "j", controlled by the pressure of the drive axle, which is increasing, activates the solenoid valve "h", interrupting the discharging of the 3rd axle air bellows and the increase in the load of the drive axle. In the event of an increase in speed (over 20 km/h), or if the "o1" switch is pressed, the relay "r2" is activated, causing deactivation of relay "r1", solenoid valve "d" and the load transfer function.

- pneumatic pipe (PA)
- - - - - electric cable + 24V
- . - . - . electric cable - mass

(&) (\$) - to valve "d" of sheet 1/2

Brake system layout drawing on sheet 1/2

Tightening tolerance - I004	ISO 2768 - ---- Tolerancing ISO 8015	Author F.MARTINI	Date 01/07/2020		Scale 1:1
		Description PNEUMATIC LAYOUT - IVECO ML225E /P 6X2P - 3rd TWIN WHEELS REAR AXLE WITH LOAD TRANSFER FUNCTION			
S.T. System Truck S.p.A. via Paesa, 28 - I 46048 Roverbella (MN) tel. +39 0376 696809 www.sftsystemtruck.com		Code 25.01.05.0076	Drawing 25.01.05.0076	Sheet 2/2	Format A3



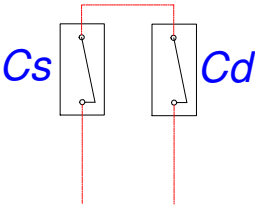
LEGENDA

- 1 - Single cylinder compressor 225 cc (optional 359 cc).
- 2 - A.P.U. Air dryer with regulator 11 bar - 4 way protection valve 7.5/6.5 bar.
- 3 - Pressure control point.
- 4 - Manual spurge valve.
- 5 - Air tank 1 - 25 l.
- 6 - Air tank 2 - 25 l.
- 7 - Pedal brake command - autolimited 7.6 ± 0.3 bar.
- 8 - Brake cylinder 22".
- 9 - Brake cylinder, combined with spring 18/27".
- 10 - Disc brake Ø377 mm, braking surface 301 cm2 per wheel.
- 11 - Hand brake with spring command - autolimited 8.5 bar.
- 12 - Rapid release valve.
- 13 - Electropneumatic valve for A.B.S.
- 14 - Safety valve for parking brake (optional).
- 15 - Low pressure switches - 6.5 bar.
- 16 - Safety valve for services (optional).
- 17 - Electric manometer low air pressure indicator - 6.5 bar.
- 18 - Central control unit A.B.S.
- 19 - M.E.T. (modulo elettronico telaio).
- 21 - Air tank trailer (+ spring brake) 15 l.
- 22 - Pressure reduction trailer section - 8.5 bar.
- 23 - Check valve.
- 24 - Trailer brake control servo-distributor - predominance 0.5 bar.
- 25 - Trailer half coupling - ISO.
- 28 - Low pressure switch - 6.5 bar.
- 29 - Servo-distributor lever.
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- 30 - Engine braking control.
- 31 - Pressure switch to command electric engine brake.
- 32 - Operating cylinder engine braking.
- 40 - Air intake valve with out return (opening 7 -0.3 bar)
- 41 - Pressure reduction valve 8.5 bar.
- 42 - Electropneumatic valve for ESP - ASR - BPA.
- 43 - Double stop valve - utilises Pmax.

Added components for 6x2 conversion:
a - Air tank 20 l.
b - Circuit selector - utilises p min.
c - Brake cylinder, combined with spring 18/27"

BRAKE WEAR CONTACT



connect "in series" with the drive axle brake wear cable

LEGEND

- Cs - CONTACT ON LEFT CALIPER (OPEN WITH WORN PADS)
- Cd - CONTACT ON RIGHT CALIPER (OPEN WITH WORN PADS)

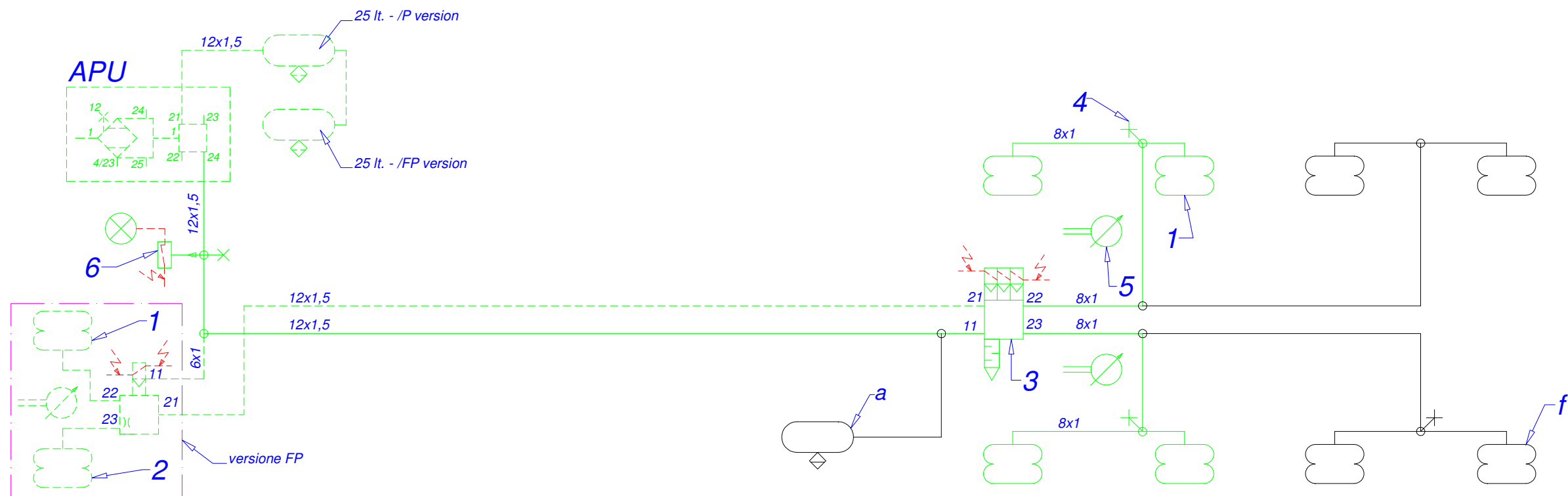
Pneumatic suspension & services layout drawing on sheet 2/2

Tightening tolerance - I004	ISO 2768 - ---- Tolerancing ISO 8015	Author P.MARTINI	Date 29/07/2014	Scale 1:1
Description PNEUMATIC LAYOUT - IVECO ML225E /P 6X2P - 3rd TWIN WHEELS REAR AXLE				
Code 25.01.05.0031	Drawing 25.01.05.0031	Sheet 1/2	Format A3	

2 - Aggiornato disegno e descrizione - 06.07.2020 - F.M.
1 - correffe inesal/tezze - schema versione EURO4 - 04.05.2015 - P.M.

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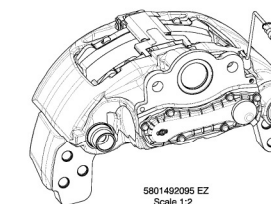
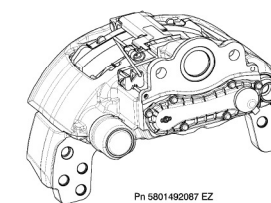
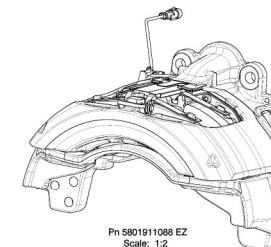
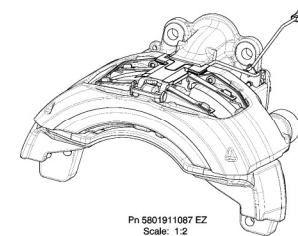
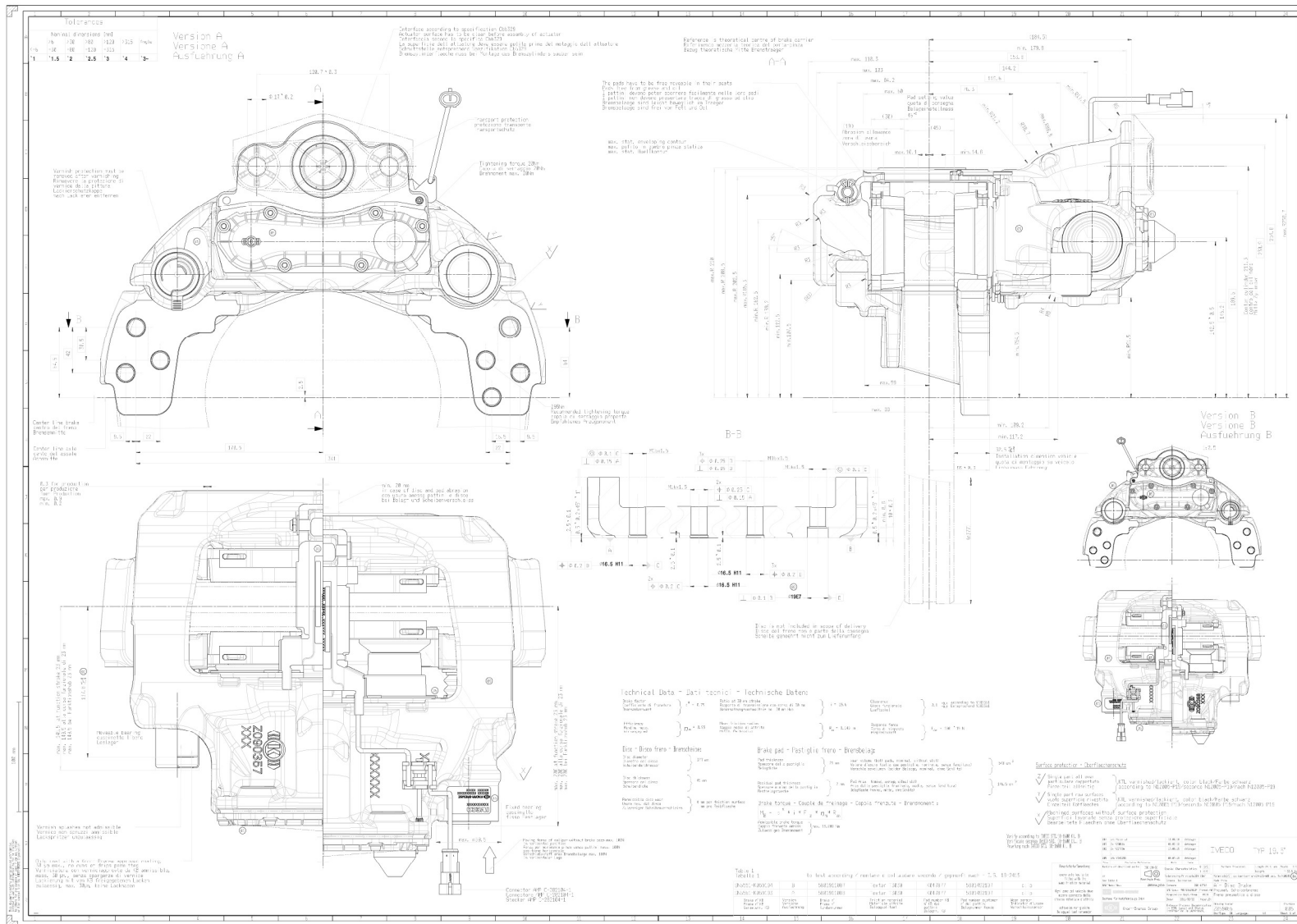


LEGENDA
1 - Suspension air bellow
2 - ECAS modulator - front axle
3 - ECAS modulator - drive axle
4 - Pressure take-off
5 - Level sensor
6 - Pressure switch (6.6 ± 0.2 bar)

Added components for 6x2 conversion:
a - Air tank, 20 lt.
f - 3rd axle air bellow

Brake system layout drawing on sheet 1/2

Tightening tolerance - I004	ISO 2768 - ---- Tolerancing ISO 8015	Author P.MARTINI	Date 29/07/2014		Scale 1:1
 S.T. System Truck S.p.A. via Paesa, 28 - I 46048 Roverbella (MN) tel. +39 0376 696809 www.stsystemtruck.com	All proprietary rights reserved by S.T. System Truck S.p.A. The reproduction, distribution and utilisation of this document as well as the communication of its content to others without express authorisation is prohibited (see ISO 16016:2016)	Description PNEUMATIC LAYOUT - IVECO ML225E /P 6X2P - 3rd TWIN WHEELS REAR AXLE			
		Code 25.01.05.0031	Drawing 25.01.05.0031	Sheet 2/2	Format A3



To test according / geprüft nach / montare e collaudare secondo - I.S. 18-2415

Verificare secondo IVECO STD. 18-1600 C1. B

Verify according to IVECO STD. 18-1600 C1. B

Prüfung nach IVECO STD. 18-1600 K1. B

Part Number	Version	Part Name	Material	Dimensions	Weight
5801911087	A	5801911087	Aluminum	100x100x100	1.5 kg
5801911088	B	5801911088	Aluminum	100x100x100	1.5 kg
5801492087	A	5801492087	Aluminum	100x100x100	1.5 kg
5801492095	B	5801492095	Aluminum	100x100x100	1.5 kg

Company	Standard	Critical Characteristic	Significant Characteristic
IVECO	19-011	OC	SC

The drawing has been issued only for the purpose of the IVECO 18-1600 C1 group and is not valid for other groups.

Component Identification

COMPONENT TO BE MARKED ACCORDING IVECO STD 18-084

IL DISPOSITIVO DEVE INDICARE IL NOME O IL MARCHIO DEL FORNITORE LA SIGLA E LA DATA DI FABBRICAZIONE SECONDO NORMA IVECO MANUFACTURING

5802013105 UY
5802012868 KZ

PRIMA KNORR 580 WEP5

5801492070 DL 52-7454

E24*13R10/05*0103*01

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[illegible]

PIANTARE ACCURATAMENTE LE VITI APPLICANDO
SULLA TESTA DELLA VITE UN CARICO
NON SUPERIORE A 2500 Kg E CONTROLLARE
L'ASSENZA DI GIOCO TRA PIANO DISCO E
SOTTOTESTA VITE.

THIS DOCUMENT IS IN ACCORDANCE WITH: ISO GEOMETRIC PRODUCT SPECIFICATION (GPS) - ISO/IR 14638 - 1995 MATERIAL PLAN							
CLEANLINESS TARGETS: FPT-PA-1050							
FOR FURTHER DRAFTING STANDARDS SEE FPT 1500							
FOR GENERAL TOLERANCE SEE FPT STD 1400							
CONFIDENTIAL INFORMATION PRODUCT LIABILITY & PROTECTION NOTICE TO USER							
WEIGHT (kg) 0.000	DRAW No. 1	CHA CODE K	LEXICON CODE 132360				
SURFACES FPT STD 1400		WORKPIECE EDGES FPT STD 1400					
		SIGNATURE					
		DATE					
DENOMINATION		DRAWER					
PONTE MS10-164 / 144		MUCCINO G. 210608					
TECHNICAL CODE		CHECKER					
52-7415		MELUSSO M. 210608					
DRAWING NAME		SUPERVISOR					
Pro/Engineer Workflow		FEOLA D. 210608					
CHANGE RESTRICTED NO MANUAL CHANGES		LABORATORY					
METRIC DIMENSIONS SHOWN IN MILLIMETERS UNLESS SPECIFIED		MANUFACT. ENG.					
SHEET NUMBER		DRAWING NUMBER					
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E24*13R10/05*0103*01