



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~~Approval withdrawn~~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 steering equipment pursuant to Regulation No. 79.

Approval No: **E24*79R04/01*0057*02**

- | | | |
|-----|---|--|
| 1. | Trade name or mark of vehicle: | <i>Iveco / System Truck</i> |
| 2. | Vehicle Type: | <i>ST MP 2B3C 79R</i> |
| | Variant(s): | <i>See Manufacturer's Information
Document ST_MP_2B3C_79R_02</i> |
| | Commercial description: | <i>See Manufacturer's Information
Document ST_MP_2B3C_79R_02</i> |
| 3. | Manufacturer's name and address: | <i>S.T. System Truck S.p.A.
Via Paesa, 28
IT-46048 Roverbella (MN)
Italy</i> |
| 4. | If applicable, name and address of manufacturer's representative: | <i>N/A</i> |
| 5. | Brief description of the steering equipment: | |
| 5.1 | Type of steering equipment: | <i>Power assisted steering</i> |
| 5.2 | Steering Control: | <i>Steering wheel</i> |
| 5.3 | Steering Transmission: | <i>Mechanical</i> |

Approval No: **E24*79R04/01*0057*02**

- 5.4 Steered Wheels: ***1st Axle***
- 5.5 Energy Source: ***Hydraulic assistance***

6. Results of tests, vehicle characteristics:

6.1 Steering effort required to achieve a turning circle of 12m radius with an intact system and 20m radius with a system in the failed condition:

6.1.1 Under normal conditions:

Turning circle	Steering effort	
12 m radius	Limit [daN]	Measured [daN]
<i>Left</i>	<i>20</i>	<i>5.5</i>
<i>Right</i>	<i>20</i>	<i>6.0</i>

6.1.2 After failure of special equipment:

Turning circle	Steering effort	
20 m radius	Limit [daN]	Measured [daN]
<i>Left</i>	<i>45</i>	<i>355.0</i>
<i>Right</i>	<i>45</i>	<i>380.0</i>

6.2 Other tests required by this regulation (pass/~~fail~~): ***Pass***

6.3 Adequate documentation in accordance with Annex 6 was supplied in respect of the following parts of the steering system: ***N/A***

7. Applicable only to towing vehicles

7.1. The towing vehicle is / is not¹ equipped with an electrical connector fulfilling the relevant requirements of Annex 7: ***N/A***

7.2. The maximum current available is: ***N/A***

8. Applicable only to trailers

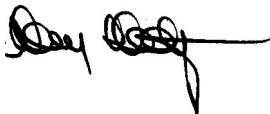
8.1. The steering system of the trailer fulfils the relevant provisions of Annex 7 to UN Regulation No. 79: ***~~Yes~~No***

8.2. The maximum current required for the trailer steering system is ***N/A***

8.3. The trailer steering system is/is not² able to supply auxiliary equipment on the trailer with electrical energy: ***N/A***

¹ Strike out what does not apply.

Approval No: E24*79R04/01*0057*02

9. Vehicle submitted for approval on: *As before and 18.10.2022*
10. Technical service responsible for conducting approval tests: *FAKT S.r.l.,
Via Lithos, 53
I-25086 Rezzato (BS)
Italy*
11. Date of report issued by that service: *As before and 14.10.2022*
12. Number of report issued by that service: *IT21/0228 - Up To 02*
13. Approval ~~granted~~/extended/~~refused~~/~~withdrawn~~:² *Extended*
14. Position of the approval mark on the vehicle: *Adhesive plate on the front wall behind radiator grill*
15. Place: *Dublin*
16. Date: *10th November, 2022*
17. Signature: 
18. Annexed to this communication is a list of documents in the approval file deposited at the administration services having delivered the approval and which can be obtained on request.



² Distinguishing number of the country which has granted/extended/refused/withdrawn approval (see approval provisions in the Regulation).

Approval No: E24*79R04/01*0057*02

Index to the Information Package

Date of issue: *7th April, 2021*

Date of latest amendment: *10th November, 2022*

Reason for extension/revision: *- Modification of company name and address of the manufacturer of the base stage;
- Deletion of TVV (EURO VI-D engines)*

1. Additional conditions, and advisory notes on legal alternatives.

2. Test report(s)

- numbers(s): *IT21/0228 - Up To 02*

- date of issue: *09.03.2021*

- date of latest amendment: *14.10.2022*

3. Information document

- number(s): *ST_MP_2B3C_79R_Up to 02*

- date of issue: *01.02.2021*

- date of latest amendment: *10.10.2022*

Documentation: *24 pages*



Approval No: E24*79R04/01*0057*02

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.: IT21/0228 - 02
UN-R79-04

Type: ST MP 2B3C 79R

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



Test Report

No. IT21/0228 Vers. 02

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 with regard to steering equipment

UN-R79

of **01.06.1970**

as last amended by

Supplement 1 to the 04 series of amendments

of **22.06.2022**

Approval status

☐	Granting of a type approval No. ...
☒	Extension to type approval No. E24*79R02/01*0057*01
☐	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.: IT21/0228 - 02
UN-R79-04

Type: ST MP 2B3C 79R

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



0 General

- 0.1 Make : Iveco / System Truck
- 0.2 Type : ST MP 2B3C 79R
- 0.2.1 Variant(s)/version(s) : See information document
- 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.
Via Puglia, 35
IT-10156 Torino
- 0.5 Information folder :
Information document
- No : ST_MP_2B3C_79R_02
- Date of issue : 01.02.2021
- Date of last change : 10.10.2022
- 0.6 List of modifications : - Modification of company name and address of the manufacturer of the base stage;
- Deletion of TVV (EURO VI-D engines)

Test Report No.: IT21/0228 - 02
UN-R79-04

Type: ST MP 2B3C 79R

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



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

- 1.1 Description: : representative vehicle
- 1.1.1 Type: : ST MP 2B3C 79R
Variant: : 4AS
Version: : 12FBDSSN9010Z10SMPNF
VIN (Stage 1): : WJME62RVZMC441468
- 1.1.2 Gear box type: : 12TX 2420 TD
No. of gears: : 12
- 1.1.3 Number and arrangement of axles: : 3; 1st steering / non powered axle
2nd fixed / powered axle
3rd fixed / powered axle
- 1.1.4 Wheelbase(s): : 1-2: 5900 mm
2-3: 1395 mm
- 1.1.5 Tyres
1st axle: : 385/65 R22,5 (single)
2nd axle: : 315/80 R22,5 (twin)
3rd axle: : 315/80 R22,5 (twin)
- 1.1.6 Kind of suspension: : 1st mechanical
2nd pneumatic
3rd pneumatic
- 1.1.7 Engine
Manufacturer: : FPT Industrial S.p.A.
Type: : F3HGE611B*N

1.1.8 Steering

Type of steering transmission	: steering wheel connected by a universal joint shaft to the steering gear-box which transmits the steering force to the front wheels (1 st axle) through leverages and articulated joints
Linkage to wheels	: Mechanical
Method of assistance	: balls circulation hydraulic steering (Type ZF8099)

1.1.9 Mass of vehicle during test(s)

laden

Total:	: 30400 kg
1 st axle:	: 9030 kg
2 nd axle:	: 10880 kg
3 rd axle:	: 10490 kg

1.1.10 Maximum speed:	: 90 km/h
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2 Test record

2.1 Place of test	: IT-Roverbella (MN)
Date of test	: series of tests A: 09.03.2021

2.2 Parameter of the test area

Test track	: Asphalt & concrete dry, ceramic tiles wet
Air temperature	: series of tests A: 12 °C
Velocity of wind	: < 2,5m/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.
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Test Report No.: IT21/0228 - 02
UN-R79-04

Type: ST MP 2B3C 79R

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



2.4 Test results

- 2.4.1 General provisions according to point 5.1. of the Regulation : fulfilled
- 2.4.2 Special provisions for trailers according to point 5.2. of the Regulation : not applicable
- 2.4.3 Failure provisions and performance according to point 5.3. of the Regulation : fulfilled
- 2.4.4 Warning signals according to point 5.4. of the Regulation : fulfilled
- 2.4.5 Provisions for the periodic technical inspection of steering equipment according to point 5.5. of the Regulation : fulfilled
- 2.4.6 Provisions for ACSF according to point 5.6. of the Regulation : Not applicable (vehicle not equipped with an ACSF)
- 2.4.7 Provisions for RCM fitted to vehicles of category M₁ and N₁ according to point 5.7. of the Regulation : Not applicable (vehicle not equipped with an RCM)

Test Report No.: IT21/0228 - 02
UN-R79-04

Type: ST MP 2B3C 79R

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



2.4.8 Test provisions for motor vehicles according to point 6.2. of the Regulation

2.4.8.1 It shall be possible to leave a : Fulfilled
curve with a radius of 50 m at a
tangent without unusual vibration
in the steering equipment at 40
km/h

2.4.8.2 When the vehicle is driven in a cir- : Fulfilled
cle with its steered wheels at ap-
proximately half lock and a con-
stant speed of at least 10 km/h,
the turning circle shall remain the
same or become larger if the
steering control is released.

2.4.8.3 Steering effort

Intact steering equipment : Turning radius: 12m
Steering control effort to the right: 60N
Steering control time to the right: 3.4s
Steering control effort to the left: 55N
Steering control time to the left: 3.3s

Failure in the steering equipment : Turning radius: 20m
Steering control effort to the right: 380N
Steering control time to the right: 3.6s
Steering control effort to the left: 355N
Steering control time to the left: 3.4s

2.4.8.4 Additional provisions for vehicles : Not applicable
equipped with ASE

2.5 Remarks : Not applicable

Test Report No.: IT21/0228 - 02
UN-R79-04

Type: ST MP 2B3C 79R

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



3 Enclosures:

1. Further enclosures : Not applicable

4 Statement of conformity:

The information folder as mentioned under No. 0.5 and the type described therein are - i n c o m p l i a n c e - with the Test Specification mentioned above.

For the present type, the selected test vehicles together with the information documents of remaining variant/version, is representative.

The tests have been carried out, considering the relevant requirements of ISO/IEC 17025:2017.

This report includes pages 1 to 7.
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TEST LABORATORY

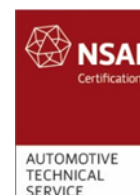
Rezzato, 14.10.2022
ah/aa

File No.:



PR-22/0494

A. Adami
Test engineer



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INDICE DEL FASCICOLO DI OMOLOGAZIONE
INDEX TO THE INFORMATION PACKAGE

Veicolo:	Autotelaio per autoveicolo			
Vehicle:	Chassis without bodywork			
Categoria del veicolo:	N3			
Category of vehicle:				
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		
Nome e indirizzo dell'eventuale rappresentante del costruttore:	non ricorre			
Name and address of the manufacturer's representative (if any):	not applicable			
Nome e indirizzo del trasformatore:	S.T. System Truck S.p.A.			
Name and address of converter:	I-46048 Roverbella (MN) - Via Paesa, 28			
Marca (denominazione commerciale del costruttore):	Iveco / System Truck			
Make (trade name of manufacturer):				
Tipo:	ST MP 2B3C 79R			
Type:				
Scheda informativa:	ST_MP_2B3C_79R_02		del	10.10.2022
Information document:			of	
chiave interpretazione varianti e versioni	ST_MP_2B3C_79R_02	allegato 0.0	del	10.10.2022
variants and versions explanation key		annex 0.0	of	
combinazioni possibili	ST_MP_2B3C_79R_02	allegato 0.1	del	10.10.2022
permissible combination		annex 0.1	of	
masse e dimensioni	ST_MP_2B3C_79R_02	allegato 1	del	10.10.2022
masses and dimensions		annex 1	of	
sospensione	ST_MP_2B3C_79R_02	allegato 2	del	10.10.2022
suspension		annex 2	of	
Disegni allegati:				
Attachment drawings:				
disegno complessivo (passo 5600 mm):	55.01.00.0137	rev.0	del	08.09.2020
overall drawing (wheelbase 5600 mm):		rev.0	of	
disegno complessivo (passo 5900 mm):	55.01.00.0127	rev.0	del	10.02.2020
overall drawing (wheelbase 5900 mm):		rev.0	of	
schemi dell'asse o degli assi sterzanti:	5802037501	rev. A1	del	28.06.2017
steering system diagram:		rev. A1	of	
schemi dell'asse o degli assi sterzanti:	5802511618	rev. A0	del	18.06.2018
steering system diagram:		rev. A0	of	
schema complessivo dell'equipaggiamento sterzo:	5802373065	rev. A0	del	05.2017
diagram of the steering equipment:		rev. A0	of	



SCHEDA INFORMATIVA INFORMATION DOCUMENT

N°
Nr ST_MP_2B3C_79R_02
del
of 10.10.2022

INDICE DELLA SCHEDA INFORMATIVA INDEX TO THE INFORMATION DOCUMENT

0.	DATI GENERALI <i>GENERAL</i>	pag. 2 <i>page 2</i>
1.	CARATTERISTICHE COSTRUTTIVE GENERALI DEL VEICOLO <i>GENERAL CONSTRUCTION CHARACTERISTICS OF THE VEHICLE</i>	pag. 2 <i>page 2</i>
2.	MASSE E DIMENSIONI <i>MASSES AND DIMENSIONS</i>	pag. 3 <i>page 3</i>
6.	SOSPENSIONI <i>SUSPENSION</i>	pag. 4 <i>page 4</i>
7.	STERZO <i>STEERING</i>	pag. 5 <i>page 5</i>
	CHIAVE INTERPRETAZIONE VARIANTI E VERSIONI <i>VARIANTS AND VERSIONS EXPLANATION KEY</i>	All. 0.0 <i>Ann. 0.0</i>
	COMBINAZIONI POSSIBILI <i>PERMISSIBLE COMBINATION</i>	All. 0.1 <i>Ann. 0.1</i>



SCHEDA INFORMATIVA INFORMATION DOCUMENT

N°
Nr ST_MP_2B3C_79R_02
del
of 10.10.2022

0. DATI GENERALI GENERAL

- 0.1. Marca (denominazione commerciale del costruttore):
Make (trade name of manufacturer): Iveco / System Truck
Iveco / System Truck
- 0.2. Tipo:
Type: ST MP 2B3C 79R
ST MP 2B3C 79R
- Varianti:
Variants: vedere allegato n° 0.0
see annex Nr. 0.0
- Versioni:
Versions: vedere allegato n° 0.0
see annex Nr. 0.0
- 0.3. Mezzi di identificazione del tipo, se marcati sul veicolo:
Means of identification of type, if marked on the vehicle: numero di omologazione del tipo su targhetta
type approval number on manufacturer's plate
- 0.3.1. Posizione della marcatura:
Location of that marking: su targhetta VIN
on VIN plate
- 0.4. Categoria del veicolo:
Category of vehicle: N3
N3
- 0.5. Nome della società e indirizzo del costruttore:
Company name and address of manufacturer: S.T. System Truck S.p.A.
I-46048 Roverbella (MN) - Via Paesa, 28
- 0.5.1. Per i veicoli omologati in più fasi, ragione sociale e indirizzo del fabbricante del veicolo nella fase iniziale / precedente:
For multi-stage approved vehicles, company name and address of the manufacturer of the base / previous stage(s) vehicle: **Iveco S.p.A.**
I-10156 Torino - Via Puglia, 35
- 0.8. Denominazione/i e indirizzo/i dello/gli stabilimento/i di montaggio:
Name(s) and address(es) of assembly plant(s): S.T. System Truck S.p.A.
I-46048 Roverbella (MN) - Via Paesa, 28
- 0.9. Denominazione e indirizzo dell'(eventuale) rappresentante del costruttore:
Name and address of the manufacturer's representative (if any): non ricorre
not applicable
- 0.10. Posizione e modalità di fissaggio del marchio di omologazione sul veicolo:
Location and method of attachment of approval mark on the vehicle: targhetta adesiva su parete frontale, dietro griglia radiatore
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:
Photographs and/or drawings of a representative vehicle:



Fotografia ¾ anteriore
Photo ¾ front



Fotografia ¾ posteriore
Photo ¾ rear

varianti - versioni:
variants - versions:

4AS - ????????????????????



SCHEDA INFORMATIVA INFORMATION DOCUMENT

N°
Nr ST_MP_2B3C_79R_02
del
of 10.10.2022

		Passo:	5600 mm:	55.01.00.0137	rev.0	del	08.09.2020
		wheelbase:		55.01.00.0137	rev.0	of	08.09.2020
		Passo:	5900 mm:	55.01.00.0127	rev.0	del	10.02.2020
		wheelbase:		55.01.00.0127	rev.0	of	10.02.2020
1.3.	Numero di assi e di ruote: Number of axles and wheels:	3	assi, axles,	10 ruote 10 wheels			
1.3.1.	Numero e posizione degli assi a ruote gemellate: Number and position of axles with twin wheels:	2	assi, axles,	2° e 3° asse 2 nd and 3 rd axle			
1.3.2.	Numero e posizione degli assi sterzanti: Number and position of steered axles:	1	asse, axle,	1° asse 1 st axle			
1.3.3.	Assi motore (numero, posizione, interconnessione): Powered axles (number, position, interconnection):	2	assi, axles,	2° e 3° asse 2 nd and 3 rd axle			albero di trasm. propeller shaft
1.8.	Lato di guida: Hand of drive:		a sinistra left	oppure or		a destra right	
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): Wheelbase(s) (fully loaded):		vedere allegato n° see annex Nr. 1	1			
2.3.1.	Carreggiata di ciascun asse sterzante: Track of each steered axle:		1°: 2040 ÷ 2140 mm 1 st : 2040 ÷ 2140 mm				
2.4.	Dimensioni (fuori tutto) del veicolo Range of vehicle dimensions (overall)						
2.4.1.	Telai non carrozzati For chassis without bodywork						
2.4.1.1	Lunghezza: Length:		vedere punto 1.1. see item 1.1.				
2.4.1.2	Larghezza: Width:		max 2600 mm max 2600 mm				
2.4.1.4.	Sbalzo anteriore: Front overhang:		1410 mm 1410 mm				
2.4.1.5.	Sbalzo posteriore: Rear overhang:		vedere punto 1.1. see item 1.1.				
2.4.2.	Telai carrozzati For chassis with bodywork						
2.4.2.1.	Lunghezza: Length:		non ricorre not applicable				
2.4.2.2.	Larghezza: Width:		non ricorre not applicable				
2.4.2.4.	Sbalzo anteriore: Front overhang:		non ricorre not applicable				
2.4.2.5.	Sbalzo posteriore: Rear overhang:		non ricorre not applicable				
2.8.	Massa massima a pieno carico tecnicamente ammissibile dichiarata dal costruttore:		vedere allegato n° 1				



SCHEDA INFORMATIVA INFORMATION DOCUMENT

N°
Nr ST_MP_2B3C_79R_02
del
of 10.10.2022

	<i>Technically permissible maximum laden mass stated by the manufacturer:</i>	<i>see annex Nr. 1</i>	
2.9.	Carico/massa massima tecnicamente ammissibile su ciascun asse: <i>Technically permissible maximum mass on each axle:</i>	vedere allegato n° 1 <i>see annex Nr. 1</i>	
2.10.	Massa tecnicamente ammissibile su ciascun gruppo di assi: <i>Technically permissible mass on each group of axles:</i>	vedere allegato n° 1 <i>see annex Nr. 1</i>	
6.	SOSPENSIONI SUSPENSION		
6.2.	Tipo e modello della sospensione di ciascun asse o ruota: <i>Type and design of the suspension of each axle or wheel:</i>	1°: sospensione meccanica, ammortizzatori idraulici <i>leaf suspension, hydraulic shock absorbers</i> 2°: sosp. meccanica o pneumatica, ammortizzatori idraulici <i>leaf or air suspension, hydraulic shock absorbers</i> 3°: sosp. meccanica o pneumatica, ammortizzatori idraulici <i>leaf or air suspension, hydraulic shock absorbers</i>	
6.6.	Pneumatici e ruote <i>Tyres and wheels</i>		
6.6.1.	Combinazione/i pneumatico/cerchione: <i>Tyre / wheel combination(s):</i>		
	a) per gli pneumatici indicare la designazione della misura, l'indice della capacità di carico, il simbolo della categoria di velocità ed eventualmente la resistenza al rotolamento ai sensi della norma ISO 28580 <i>a) for tyres indicate size designation, load-capacity index, speed category symbol, rolling resistance in accordance with ISO 28580 (where applicable)</i>		
	b) per le ruote, indicare dimensioni del cerchione e dati della campanatura <i>b) for wheels indicate rim size(s) and off-set(s)</i>		
6.6.1.1.	Assi <i>Axels</i>		
6.6.1.1.1.	Asse 1: <i>Axle 1:</i>	vedere allegato n° 2 <i>see annex Nr. 2</i>	2
6.6.1.1.2.	Asse 2: <i>Axle 2:</i>	vedere allegato n° 2 <i>see annex Nr. 2</i>	
6.6.1.1.3.	Asse 3: <i>Axle 3:</i>	vedere allegato n° 2 <i>see annex Nr. 2</i>	
6.6.1.2.	Ruota di scorta (se disponibile): <i>Spare wheel, if any:</i>	vedere punto 6.6.1.1. <i>see point 6.6.1.1.</i>	
6.6.3.	Pressione/i degli pneumatici raccomandata dal fabbricante del veicolo: <i>Tyre pressure(s) as recommended by the vehicle manufacturer:</i>		
6.6.3.1.	1° asse: <i>1st axle:</i>	vedere 6.6.1.1.1. <i>see 6.6.1.1.1.</i>	
6.6.3.2.	2° asse: <i>2nd axle:</i>	vedere 6.6.1.1.2. <i>see 6.6.1.1.2.</i>	



SCHEDA INFORMATIVA INFORMATION DOCUMENT

N°
Nr ST_MP_2B3C_79R_02
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- 6.6.3.3. 3° asse:
3rd axle: vedere 6.6.1.1.3.
see 6.6.1.1.3.
7. **STERZO**
STEERING
- 7.1. Schemi dell'asse o degli assi sterzanti:
Steering system diagram: dis. n° 5802037501 del 28.06.2017 rev. A1
e n° 5802511618 del 18.06.2018 rev. A0
drawing No. 5802037501 of 28.06.2017 rev. A1
and No. 5802511618 of 18.06.2018 rev. A0
- 7.2. Trasmissione e comando
Transmission and control
- 7.2.1. Tipo di trasmissione dello sterzo (precisare se anteriore o posteriore):
Type of steering transmission (specify for front and rear, if applicable): volante (Ø470-510 mm) collegato mediante un albero alla scatola dello sterzo che trasmette la forza dello sterzo alle ruote anteriori (1° asse) mediante leveraggi e giunti a snodo steering wheel (Ø470-510 mm) connected by a universal joint shaft to the steering gear-box which transmits the steering force to the front wheels (1st axle) through leverages and articulated joints
- 7.2.2. Trasmissione alle ruote (compresi sistemi diversi da quelli meccanici; eventualmente, specificare se anteriore o posteriore):
Linkage to wheels (including other than mechanical means; specify for front and rear, if applicable): vedere punto 7.2.1.
see item 7.2.1.
- 7.2.3. Tipo degli eventuali servocomandi:
Method of assistance, if any: idroguida a circolazione di sfere (ZF opp. Bosch 8099)
balls circulation hydraulic steering (ZF or Bosch 8099)
- 7.2.4. Schema complessivo dell'equipaggiamento sterzo illustrante la posizione sul veicolo dei vari dispositivi di sterzata:
Diagram of the steering equipment as a whole, showing the position on the vehicle of the various devices influencing its steering behaviour: dis n° 5802373065 del 05.2017 rev. A0
drawing No. 5802373065 of 05.2017 rev. A0
- 7.2.5. Schema del comando sterzo
Schematic diagram of the steering control
- 7.3. Angolo massimo di sterzata delle ruote
Maximum steering angle
- 7.3.1. A destra:
Numero di giri del volante (o dati equivalenti):
To the right:
Number of turns of the steering wheel (or equivalent data) vedere punto 7.2.4.
vedere punto 7.2.4.
see item 7.2.4.
see item 7.2.4.
- 7.3.2. A sinistra:
Numero di giri del volante (o dati equivalenti):
To the left:
Number of turns of the steering wheel (or equivalent data): vedere punto 7.2.4.
vedere punto 7.2.4.
see item 7.2.4.
see item 7.2.4.

Revisione 0 del 10.10.2022
Revision of

x La Ditta

.....
(ing. Paolo MARTINI)
Ruolo: Direttore tecnico
Position: Technical Director



SCHEDA INFORMATIVA INFORMATION DOCUMENT

All n° 0.0
Annex Nr
del 10.10.2022
of

CHIAVE INTERPRETAZIONE VARIANTI E VERSIONI VARIANTS AND VERSIONS EXPLANATION KEY

Caratteristiche Characteristics	Descrizione Description	Tipo Type			Varianti Variants			Versioni Versions											
Nome costruttore Manufacturer's company name	Iveco / S.T. System Truck S.p.A.	ST																	
Tipo di modifica della fase 2 Stage 2 modify kind	Modifica passo Wheelbase modify		MP																
Marca, modello, categoria, tipo e numero di assi della fase 1 Make, model, category and number of axles of stage 1	X-Way, carro 6x4, cat. N3, 3 assi X-Way, truck 6x4, cat. N3, 3 axles			2B3C															
Fase di completamento Extent of build	incompleto X-Way: cabinato non carrozzato incomplete X-Way: chassis cab without body				4														
Numero assi sterzanti Number steering axle	1 (1° asse / 1 st axle)					A													
Principio di funzionamento Working principle	accensione spontanea compression ignition					S													
Cilindrata Engine capacity	8710 cm ³							09											
	11120 cm ³							11											
	12882 cm ³							12											
Interasse (1° ÷ 3° asse) Wheelbase (1 st ÷ 3 rd axle)	da 5100 mm a 5600 o 5900 mm from 5100 mm to 5600 or 5900 mm								FB										
Direttiva emissioni Directive emission	Euro VI E									E									
Tipo cabina Cab type	AD										D								
	AT										T								
	AS										S								
Potenza del motore Engine power	265 kW											B							
	294 kW											V							
	309 kW											C							
	338 kW											E							
	353 kW											F							
	390 kW											Y							
	419 kW											S							



SCHEDA INFORMATIVA INFORMATION DOCUMENT

All n° **0.0**
Annex Nr
del
of **10.10.2022**

CHIAVE INTERPRETAZIONE VARIANTI E VERSIONI VARIANTS AND VERSIONS EXPLANATION KEY

Caratteristiche Characteristics	Descrizione Description	Tipo Type	Varianti Variants	Versioni Versions
Tipo 2° e 3° asse 2 nd and 3 rd axle type	HR			J
	SR			N
Massa massima su 1° asse Maximum mass on 1 st axle	7500 kg			75
	8000 kg			80
	8500 kg			85
	9000 kg			90
Massa massima su 2° asse Maximum mass on 2 nd axle	10500 kg			10
	11500 kg			11
Asse aggiunto Added axle	non ricorre not applicable			Z
Massa massima su 3° asse Maximum mass on 3 rd axle	10500 kg			10
	11500 kg			11
Uscita gas di scarico Exhaust exit	laterale sinistra / side left			S
	verticale / vertical			V
	centrale / centre			C
Tipo di cambio Type of gearbox	manuale / manual			M
	automatico / automatic			A
Interasse (2° ÷ 3° asse) Wheelbase (2 nd ÷ 3 rd axle)	1395 mm			P
ADR	con ADR / with ADR			S
	con ADR classe AT / with ADR Class AT			T
	senza ADR / without ADR			N
Sistema di frenatura Braking system	frenatura EBS (freni a disco), veicolo rimorchiante EBS braking (disc brakes), towing vehicle			F
	frenatura EBS (freni a disco), veicolo non rimorchiante EBS braking (disc brakes), no towing vehicle			N



SCHEDA INFORMATIVA INFORMATION DOCUMENT

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del
of

0.1
10.10.2022

COMBINAZIONI POSSIBILI PERMISSIBLE COMBINATION

Varianti
Variants

Versioni
Versions

4 | A | S

0	9	FB	E	D	B	N	75	10	Z	10	S	M	P	S	F
				T	V	J	80				V		N	N	N
							85				C			T	
							90								

4 | A | S

0	9	FB	E	D	B	N	80	11	Z	11	S	M	P	S	F
				T	V	J	85				V		N	N	N
							90				C			T	

4 | A | S

0	9	FB	E	D	B	N	75	10	Z	10	S	A	P	S	N
				T		J	80				V		N	N	
							85				C			T	
							90								

4 | A | S

0	9	FB	E	D	B	N	80	11	Z	11	S	A	P	S	N
				T		J	85				V		N	N	
							90				C			T	

4 | A | S

1	1	FB	E	D	C	N	75	10	Z	10	S	M	P	S	F
				T	E	J	80				V		N	N	N
					F		85				C			T	
							90								

4 | A | S

1	1	FB	E	D	C	N	80	11	Z	11	S	M	P	S	F
				T	E	J	85				V		N	N	N
					F		90				C			T	

4 | A | S

1	2	FB	E	S	Y	N	75	10	Z	10	S	M	P	S	F
					S	J	80				V		N	N	N
							85				C			T	
							90								

4 | A | S

1	2	FB	E	S	Y	N	80	11	Z	11	S	M	P	S	F
					S	J	85				V		N	N	N
							90				C			T	



SCHEMA INFORMATIVA INFORMATION DOCUMENT

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1
10.10.2022

Punto Item	Variante Variant	Versione Version	Descrizione Description		
2.1.	4AS	????????????????	1° ÷ 2° 5600 mm	2° ÷ 3° 1395 mm	
	4AS	????????????????	5900 mm	1395 mm	
2.8.	4AS	????????7510?10????	27000 kg		
	4AS	????????8010?10????	27000 kg		
	4AS	????????8510?10????	29000 kg		
	4AS	????????9010?10????	29500 kg		
	4AS	????????8011?11????	30000 kg		
	4AS	????????8511?11????	30000 kg		
	4AS	????????9011?11????	30000 kg		
2.9.	4AS	????????7510?10????	1° 7500	2° 10500	3° 10500 kg
	4AS	????????8010?10????	8000	10500	10500 kg
	4AS	????????8510?10????	8500	10500	10500 kg
	4AS	????????9010?10????	9000	10500	10500 kg
	4AS	????????8011?11????	8000	11500	11500 kg (*)
	4AS	????????8511?11????	8500	11500	11500 kg (*)
	4AS	????????9011?11????	9000	11500	11500 kg (*)
2.10.	4AS	????????7510?10????	T _{post} / T _{rear} 21000 kg		
	4AS	????????8010?10????	21000 kg		
	4AS	????????8510?10????	21000 kg		
	4AS	????????9010?10????	21000 kg		
	4AS	????????8011?11????	23000 kg (*)		
	4AS	????????8511?11????	23000 kg (*)		
	4AS	????????9011?11????	23000 kg (*)		

(*) Solo per massa massima tecnicamente ammissibile di 30000 kg

(*) Only Technically permissible maximum laden mass of 30000 kg



SCHEDA INFORMATIVA INFORMATION DOCUMENT

All n° 2
Annex Nr
del 10.10.2022
of

Punto Item	Variante Variant	Versione Version	Descrizione Description									
	Varianti Variants	Versioni Versions	Dimensione Size	Ind. di carico Load index	Carico Payload	Indice di vel. Speed index	Dim. cerchio Rim size	Offset acciaio Offset steel	Offset alluminio Offset aluminium	Coeff. di resistenza al rotolamento Rolling resistance coefficient	Raggio Radius	Pressione Pressure
6.6.1.1.1.	4AS	????????75???????????	315/80 R22,5	154	7500	G	22,5 x 9,00	161-162	150-154	RRC ≤ 4,0 4,1 ≤ RRC ≤ 5,0 5,1 ≤ RRC ≤ 6,0 6,1 ≤ RRC ≤ 7,0 7,1 ≤ RRC ≤ 8,0 RRC ≥ 8,1	523	8,00 bar
			315/70 R22,5	154	7500	G	22,5 x 9,00	161-162	150-154		492	9,00 bar
			13 R22,5	154	7500	G	22,5 x 9,00	161-162	150-154		546	8,00 bar
			295/80 R22,5	154	7500	G	22,5 x 8,25 22,5 x 9,00	152-159 161-162	145-148 150-154		507	9,00 bar
			385/55 R22,5	154	7500	G	22,5 x 11,75	130	120-135		480	7,75 bar
			385/65 R22,5	154	7500	G	22,5 x 11,75	120-135	120-135		517	7,50 bar
	4AS	????????80???????????	315/80 R22,5	156	8000	G	22,5 x 9,00	161-162	150-154		523	8,50 bar
			315/70 R22,5	156	8000	G	22,5 x 9,00	161-162	150-154		492	9,00 bar
			13 R22,5	156	8000	G	22,5 x 9,00	161-162	150-154		546	8,50 bar
			385/55 R22,5	156	8000	G	22,5 x 11,75	130	120-135		480	8,50 bar
			385/65 R22,5	156	8000	G	22,5 x 11,75	120-135	120-135		517	8,00 bar
			315/80 R22,5	158	8500	G	22,5 x 9,00	161-162	150-154		523	9,00 bar
	4AS	????????85???????????	385/55 R22,5	158	8500	G	22,5 x 11,75	130	120-135		480	9,00 bar
			385/65 R22,5	158	8500	G	22,5 x 11,75	120-135	120-135		517	8,50 bar
			385/55 R22,5	160	9000	G	22,5 x 11,75	130	120-135		480	9,00 bar
	4AS	????????90???????????	385/65 R22,5	160	9000	G	22,5 x 11,75	120-135	120-135		517	9,00 bar
6.6.1.1.2.	4AS	????????10???????????	315/80 R22,5	142	10500	G	22,5 x 9,00	161-162	150-154	RRC ≤ 4,0 4,1 ≤ RRC ≤ 5,0 5,1 ≤ RRC ≤ 6,0 6,1 ≤ RRC ≤ 7,0 7,1 ≤ RRC ≤ 8,0 RRC ≥ 8,1	523	6,25 bar
			315/70 R22,5	142	10500	G	22,5 x 9,00	161-162	150-154		492	7,00 bar
			13 R22,5	142	10500	G	22,5 x 9,00	161-162	150-154		546	6,00 bar
			295/80 R22,5	142	10500	G	22,5 x 8,25 22,5 x 9,00	152-159 161-162	145-148 150-154		507	7,00 bar
			315/80 R22,5	145	11500	G	22,5 x 9,00	161-162	150-154		523	6,75 bar
			315/70 R22,5	145	11500	G	22,5 x 9,00	161-162	150-154		492	7,75 bar
	4AS	????????11???????????	13 R22,5	145	11500	G	22,5 x 9,00	161-162	150-154		546	6,75 bar
			295/80 R22,5	145	11500	G	22,5 x 8,25 22,5 x 9,00	152-159 161-162	145-148 150-154		507	7,75 bar



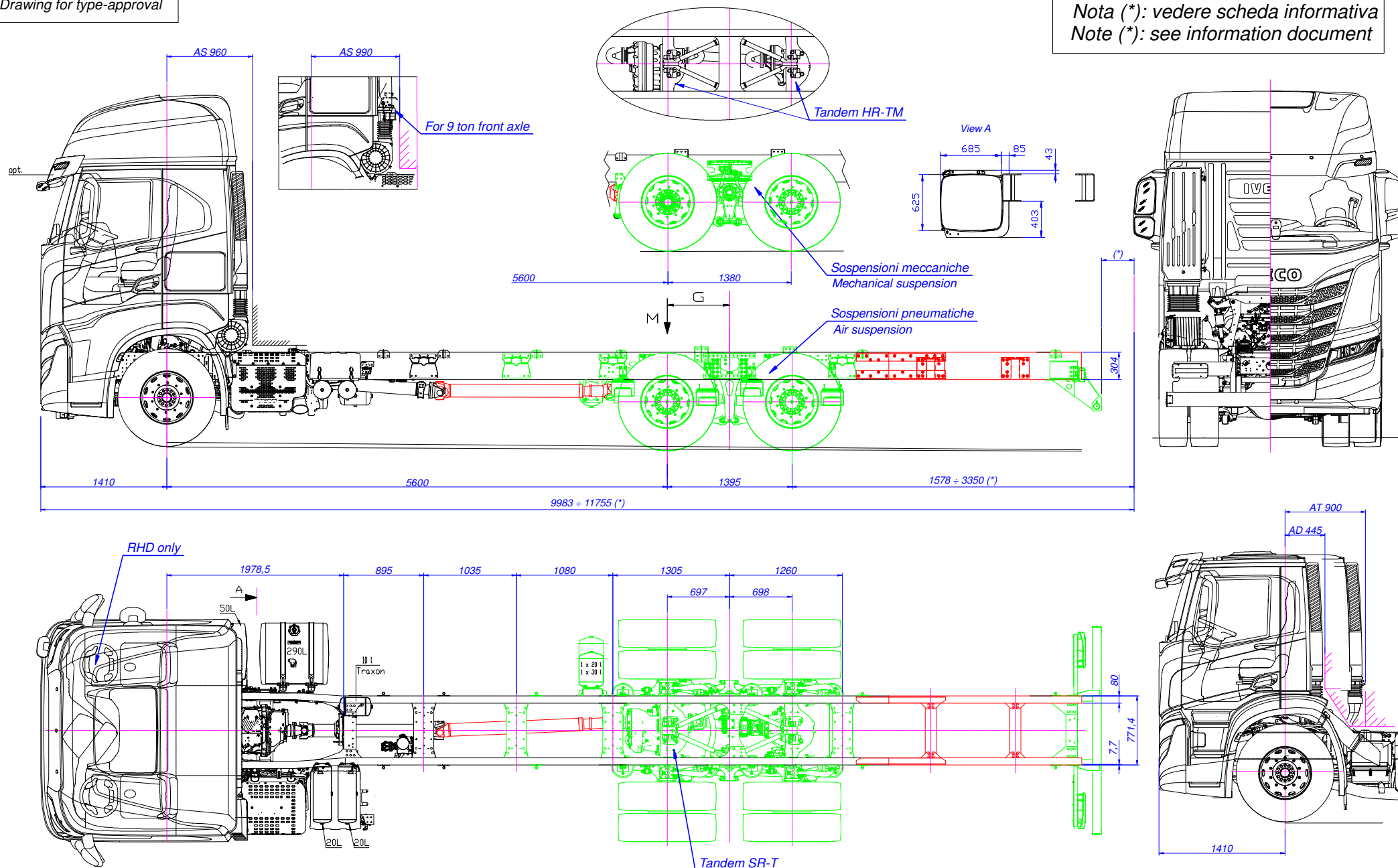
SCHEDA INFORMATIVA INFORMATION DOCUMENT

All n° **2**
Annex Nr
del **10.10.2022**
of

Punto Item	Variante Variant	Versione Version	Descrizione Description									
6.6.1.1.3.	4AS	?????????????10?????	315/80 R22,5	142	10500	G	22,5 x 9,00	161-162	150-154		523	6,25 bar
			315/70 R22,5	142	10500	G	22,5 x 9,00	161-162	150-154		492	7,00 bar
			13 R22,5	142	10500	G	22,5 x 9,00	161-162	150-154	RRC ≤ 4,0	546	6,00 bar
			295/80 R22,5	142	10500	G	22,5 x 8,25 22,5 x 9,00	152-159 161-162	145-148 150-154	4,1 ≤ RRC ≤ 5,0 5,1 ≤ RRC ≤ 6,0	507	7,00 bar
	4AS	?????????????11?????	315/80 R22,5	145	11500	G	22,5 x 9,00	161-162	150-154	6,1 ≤ RRC ≤ 7,0	523	6,75 bar
			315/70 R22,5	145	11500	G	22,5 x 9,00	161-162	150-154	7,1 ≤ RRC ≤ 8,0	492	7,75 bar
			13 R22,5	145	11500	G	22,5 x 9,00	161-162	150-154	RRC ≥ 8,1	546	6,75 bar
			295/80 R22,5	145	11500	G	22,5 x 8,25 22,5 x 9,00	152-159 161-162	145-148 150-154		507	7,75 bar

Disegno per omologazione
Drawing for type-approval

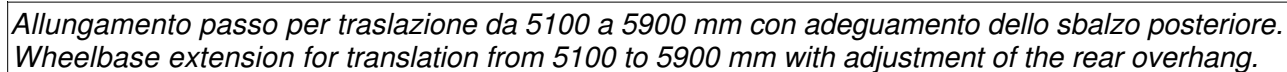
Nota (*): vedere scheda informativa
Note (*): see information document

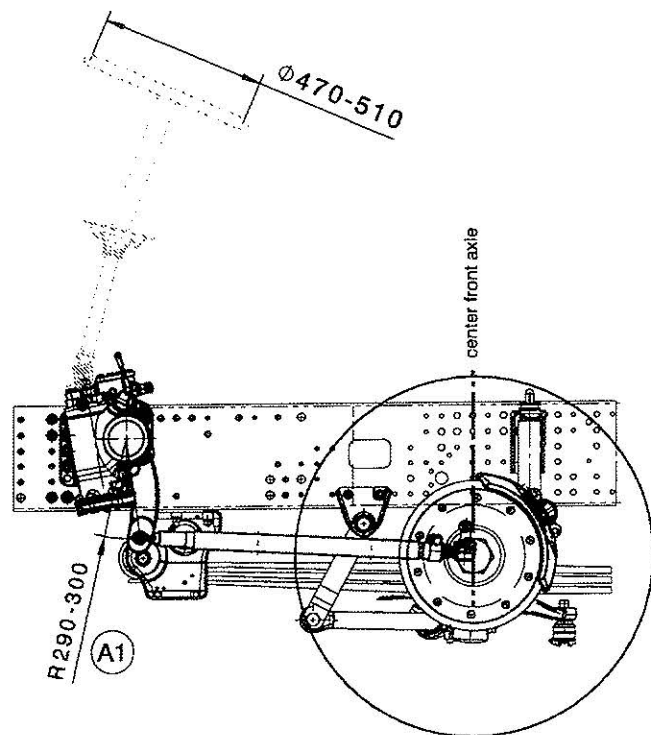


Allungamento passo per traslazione da 5100 a 5600 mm con adeguamento dello sbalzo posteriore.
Wheelbase extension for translation from 5100 to 5600 mm with adjustment of the rear overhang.

Tightening tolerance = 100%	ISO 2768 - ---- Tolerancing ISO 8015	Author P. MARTINI	Date 08/09/2020	Scale 1:20
VECO 283C AD/AT/AS 260/300XZ/P, HR ON+ 6x4 PASSO DA 5100+1395 A 5600+1395 MM				
55.01.00.0137	55.01.00.0137	Sheet 1/1	Format A1	

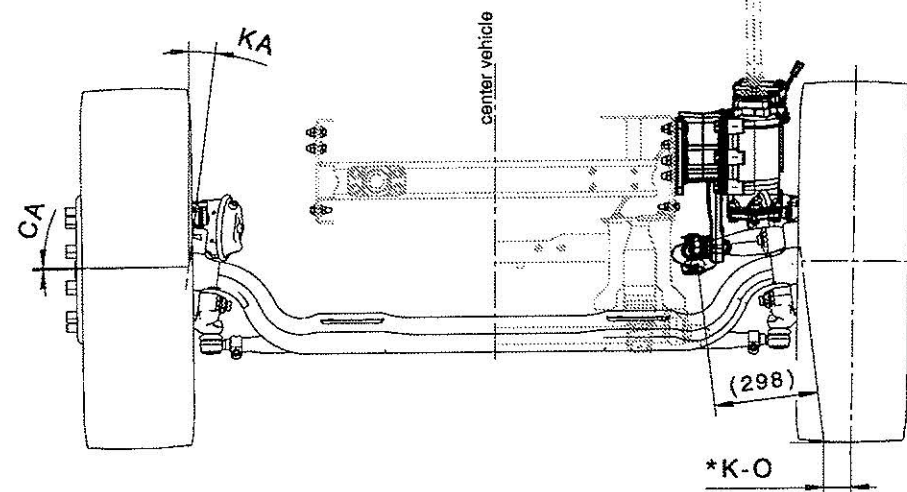
E24*79R04/01*0057*02





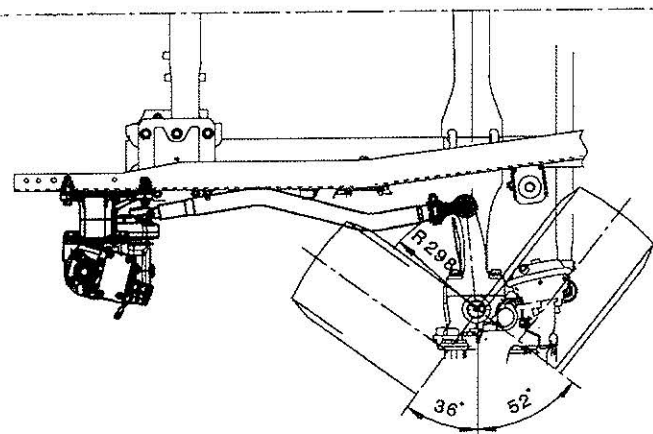
	front axle
K-O (KINGPIN-OFFSET)	*75 - 130
CA (CAMBER-ANGLE)	0,8°
KA (KINGPIN-ANGLE)	7°
CASTER-ANGLE	1,4° - 3°
TOE-IN nominal value	+1,5mm/m
tolerance	(±1,5mm/m)

* K-O (KINGPIN-OFFSET) depends on tyres and rim-sizes



steering wheel rotation angle: 2088°
(from center to end lock: 1044° left and 1044° right)

overall ratio front axle = $2088^\circ / (52^\circ + 36^\circ) = 23,7$

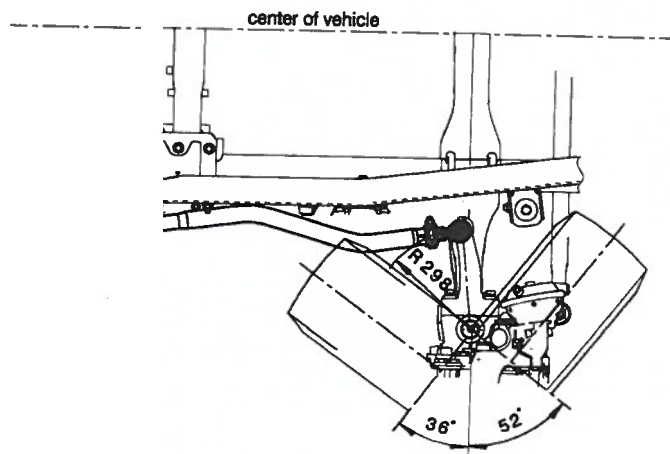
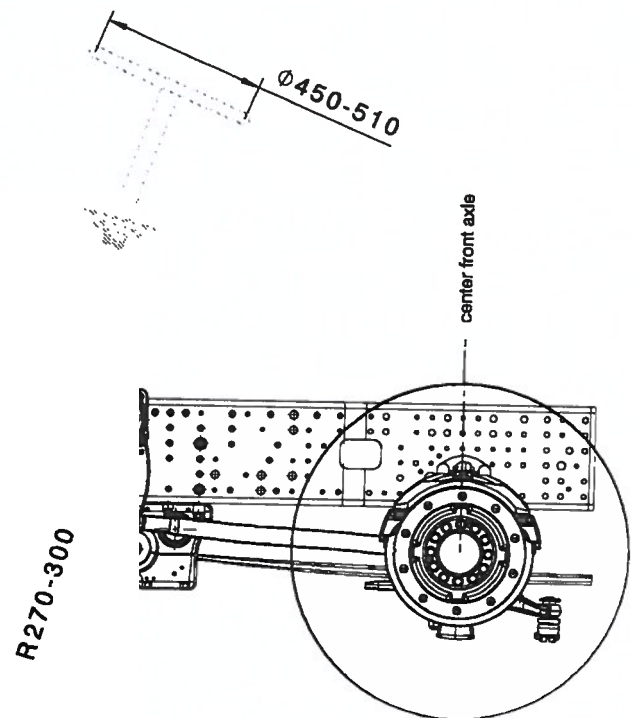


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Model 4x2P/6x2P/6x4 LHD+RHD steering-gear-type 8099-2-pumps i=22,2-26,2 Opt.78325 (Emergency steering circuit)		Designation		Lex Code 155387	
Scale	schematic	A1	13AIRAM345040	20.06.17	Esc
Name	Date	A0	12CRY01008040	10.04.15	NAG
Drawn by	SCHNEIDER Elias	19/06/2017	Index	Modification Notice Code	Date
Checked by	SCHNEIDER Elias	20/06/2017			
Approved	KOEBERLE	Department	E040	No 5802037501 DC 50-1402	
CNH INDUSTRIAL				Sheet 1/1	

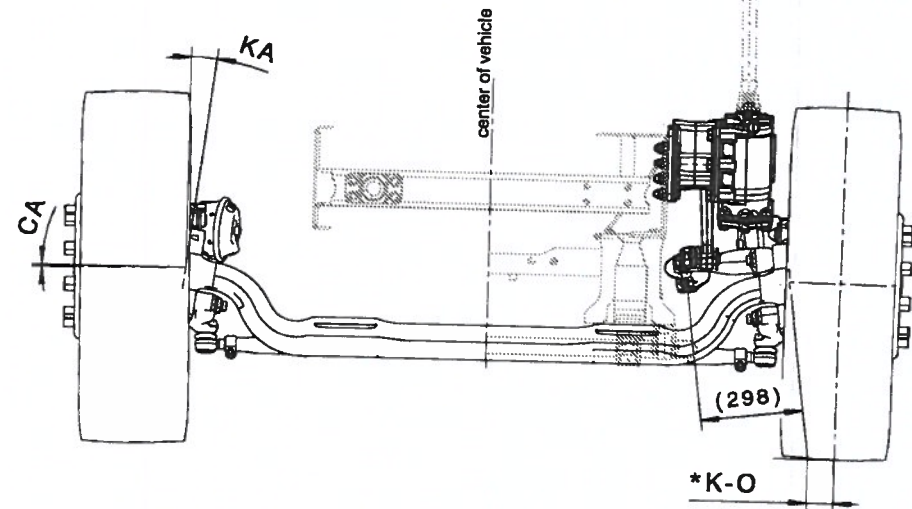
E24*79R04/01*0057*02

Modifications
A1 - 8x4 added to description, caster angle changed to 1,4° - 3° (was 2° - 3°), pitman arm radius changed to R290-300 (was R290).
Toe-in changed to +1,5 mm/m (±1,5mm/m), was +1mm (±1,5mm/m). IVECO title block replaced by CNH title block



	front axle
K-O (KINGPIN-OFFSET)	*75 - 130
CA (CAMBER-ANGLE)	$0,8^\circ$
KA (KINGPIN-ANGLE)	7°
CASTER-ANGLE	$1,4^\circ - 3^\circ$
TOE-IN nominal value	$+1,5\text{mm/m}$
tolerance	$(\pm 1,5\text{mm/m})$

* K-O (KINGPIN-OFFSET) depends on tyres and rim-sizes



steering gear type	8098 $i=17-20$	8098 $i=22,2-26,2$
steering wheel rotation angel (from end lock to end lock)	1674° (837° left, 837° right)	2088° (1044° left, 1044° right)
overall ratio front axle	$1674^\circ / (52^\circ + 36^\circ)$ $= 19,0$	$2088^\circ / (52^\circ + 36^\circ)$ $= 23,7$

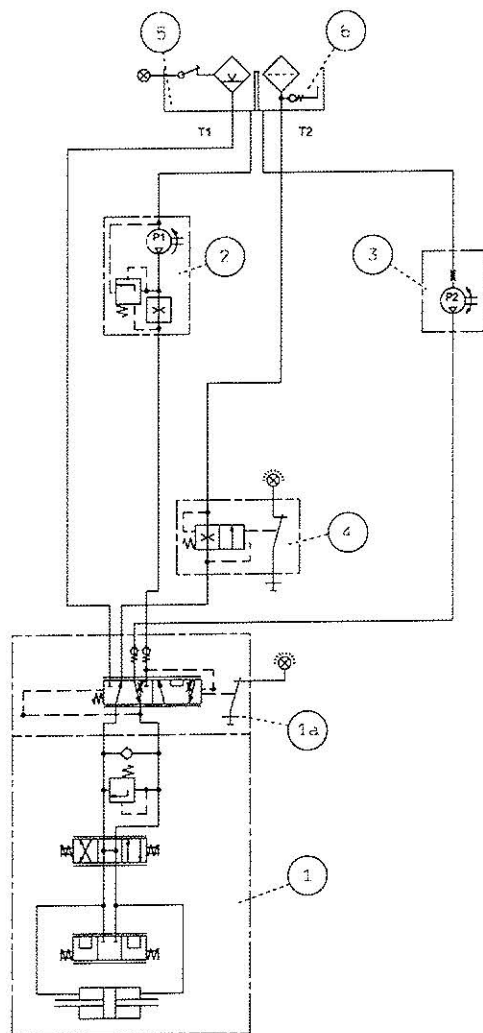
LHD is shown, RHD is mirror image

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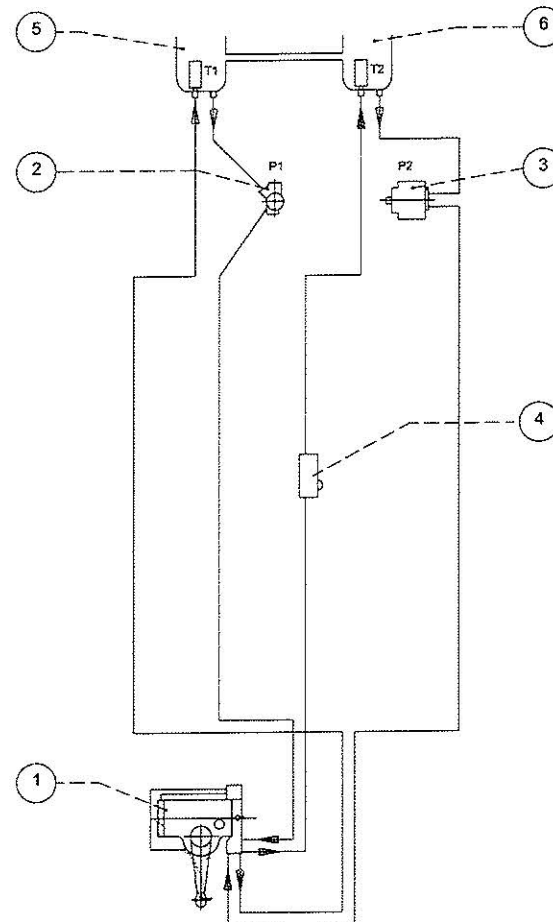
Model 4x2P/6x2P/6x4_LHD+RHD_steering-gear-type_8098									
Scale schematic									
Name		Date		A0		11FRO01042040		18.06.18 Esc	
Drawn by SCHNEIDER Elias		15/06/18		Index		Modification Notice Code		Date Name	
Checked by SCHNEIDER Elias		18/06/18							
Approved		Department				No		Sheet	
KOEBERLE		E040				5802511618 DD 50-1402		1/1	
								A3	

Modifications

hydraulic diagram



hydraulic scheme



Item	Description	TYPE/Characteristics
1	1) 1,5-CIRCUIT STEERING GEAR WITH INTEGRATED PRESSURE RELIEF VALVE 1a) WITH SWITCH-VALVE FOR EMERGENCY CIRCUIT	8099-1,5 i=22,2-26,2
2	VANE PUMP ENGINE-DRIVEN WITHOUT PRESSURE RELIEF VALVE	FN4 Q _{cons} =16l/min Q _{geo} =21cm³/rev
3	RADIAL PISTON PUMP GROUND-DRIVEN WITHOUT PRESSURE RELIEF VALVE	RN 8605 Q _{cons} =16l/min Q _{geo} =16cm³/rev
4	FLOW INDICATOR (ON-switch)	flow < 4-5l/min switch contacts closed flow > 4-5l/min switch contacts open
5	STEERING OIL TANK (2 chambers) with integrated filter elements for each chamber and level sensor/indicator	1x 2,1l nominal size alternatively 2x 1,5l nominal size

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STANDARDIS		General rules: 1000-100		10-2658	
Sole		SCHEMA			
CNH0		n° 0			
		n° 0			
Name		Date		Material	
19/06/2017		05/2017		Revision	
20/06/2017		A0		11EGM01376043	
10/06/2017		DI		LINE DIAGRAM	
10/06/2017		DI		4x2/6x2/6x4_LHD+RHD_8099-1,5	
10/06/2017		DI		5802373065 DC 50-1494	
10/06/2017		DI		A2	

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