THE UNITED KINGDOM VEHICLE APPROVAL AUTHORITY

COMMUNICATION CONCERNING THE ~~APPROVAL GRANTED~~ [(1)]/ APPROVAL EXTENDED [(1)]/ ~~APPROVAL REFUSED~~ [(1)]/ ~~APPROVAL WITHDRAWN~~ [(1)]/ ~~PRODUCTION DEFINITIVELY DISCONTINUED~~ [(1)] OF A TYPE OF MECHANICAL COUPLING DEVICE OR COMPONENT, PURSUANT TO REGULATION NO 55.01

E11 Approval No: 55R-011046

Extension No: 01

1. Trade name or mark of the device or component: V. Orlandi Spa

2. Manufacturer's name for the type of device or component: E509

3. Manufacturer's name and address:
V. Orlandi Spa
Via Quinzano 3
25020 Flero (BS)
Italy

4. If applicable, name and address of the manufacturer's representative: Not applicable

5. Alternative supplier's names or trade-marks applied to the device or component: Not applicable

6. Name and address of company or body taking responsibility for the conformity of production: See item 3

7. Submitted for approval on: As before and 30 January 2014

8. Technical service responsible for conducting approval tests: TÜV SÜD Auto Service GmbH

28-May-14
UK Approval Authority 1

9. Brief description: Non-standard 50 mm pin diameter drawbar coupling

9.1. Type and class of device or component: E509, C50-X

9.2. Characteristic values:

9.2.1. Primary values:

D= 200 kN Dc= 135 kN S= 1000 kg

U= - tonnes V= 75 kN

Alternative values:

D= - kN Dc= - kN S= 2500 kg

U= - tonnes V= 50 kN

9.3. For Class A mechanical coupling devices or components, including towing brackets: Not applicable

Vehicle manufacturer's maximum permissible vehicle mass:

Distribution of maximum permissible vehicle mass between the axles:

Vehicle manufacturer's maximum permissible towable trailer mass:

Vehicle manufacturer's maximum permissible static mass on coupling ball:

Maximum mass of the vehicle, with bodywork, in running order, including coolant, oils, fuel, tools and spare wheel (if supplied) but not including driver:

Loading condition under which the tow ball height of a mechanical coupling device fitted to category M_1 vehicles is to be measured -see paragraph 2 of annex 7, appendix 1:

9.4. For class B coupling heads, is the coupling head intended to be fitted to an unbraked O_1 trailer: Not applicable

10. Instructions for the attachment of the coupling device or component type to the vehicle and photographs or drawings of the mounting points given by the vehicle manufacturer: See manufacturer's documentation

11. Information on the fitting of any special reinforcing brackets or plates or spacing components necessary for the attachment of the coupling device or component: Not applicable

12. Additional information where the use of the coupling device or component is restricted to special types of vehicles - see annex 5, paragraph 3.4.: Not applicable

13. For Class K hook type couplings, details of the drawbar eyes suitable for use with the particular hook type. Not applicable

14. Date of test report: As before and 08 May 2014

15. Number of test report: 13-00392-CX-GBM Extension 01

16. Approval mark position: Manufacturer's plate on the automatic box riveted

17. Reason(s) for extension of approval: To cover
1) Addition of further version
2) Change of name of technical service

18. Approval ~~GRANTED~~/EXTENDED/~~REFUSED/WITHDRAWN~~ (1)

19. Place: BRISTOL

20. Date: 28 MAY 2014

21. Signature: 

A. W. STENNING
Head of Technical and Quality Support Group

22. The list of documents deposited with the Administration Service which has granted approval is annexed to this communication and may be obtained on request.

Any remarks: Approval to Supplement 03

(1) Strike out what does not apply.

INFORMATION DOCUMENT N° E509 -01

relating to Component Type Approval of
Mechanical Coupling Devices for Motor Vehicles and their Trailers
(regulation UNECE R55.01).

0. GENERAL

0.1. Make (trade name of manufacturer):
V.ORLANDI Spa

0.2. Type and commercial description(s):
E509 Automatic pin coupling

0.5. Name and address of manufacturer:
V.Orlandi Spa, Via Quinzano 3, 25020 FLERO -BS- ITALY

0.7. In case of technical components the location and method of affixing of the EEC-approval mark:
See attached drawing n° GE 50 000 dated: 02/05/13 revision T
and GE 52 500 dated: 07/02/14 revision A.

0.8. Address of the plant(s) where the assembly takes place:
V.Orlandi Spa, Via Quinzano 3, 25020 FLERO -BS- ITALY

1. CONNECTION BETWEEN DRAWING VEHICLES AND TRAILERS AND SEMI-TRAILERS.

1.1. Detailled technical description (including drawings and material specifications) of the type of the mechanical coupling device:
See attached documents

1.2. Class and type of the coupling device(s): Class C50-X
E509 non standard automatic coupling

1.3. Maximum D-value (1): 200 kN

Maximum Dc-value (1): 135 kN

1.4. Maximum vertical load S at the coupling point (1): 1000 kg / 2500 kg

1.5. Maximum load (U) at the fifth wheel coupling (1): Not applicable

1.6. Maximum V-value (1): 75 kN / 50 kN

1.7. Instructions of attachment of the coupling type to the vehicle and the photographs or drawings of the fixing points at the vehicle, given by the manufacturer, additional information if the use of the coupling type is restricted to special types of vehicles:

Fixing instructions according to drawing GE 50 000 dated: 02/05/13 revision T and GE 52 500 dated: 07/02/14 revision A.

for vehicles class N2 and N3 according to 70/156/EEC

1.8. Information of the fitting of special towing brackets or mounting plates (1):

Not applicable

(1) If applicable

Flero, 08/05/2014

TECHNICAL DATA and MOUNTING INSTRUCTIONS FOR E509 AUTOMATIC COUPLING

INTRODUCTION

Description of the coupling

Automatic coupling type E509 for 50mm drawbar eye according to R55.01 class D50 suitable for truck drawbeams with hole-pattern 160 x 100 mm classes C50-5 / 6 / 7 .

CHARACTERISTICS

Loads

The coupling has been tested in following conditions:

Maximum D-value :	200	kN
Maximum Dc-value :	135	kN
Maximum vertical load S at the coupling point :	1000	kg
Maximum V-value :	75	kN

Mobility of the drawbar eye

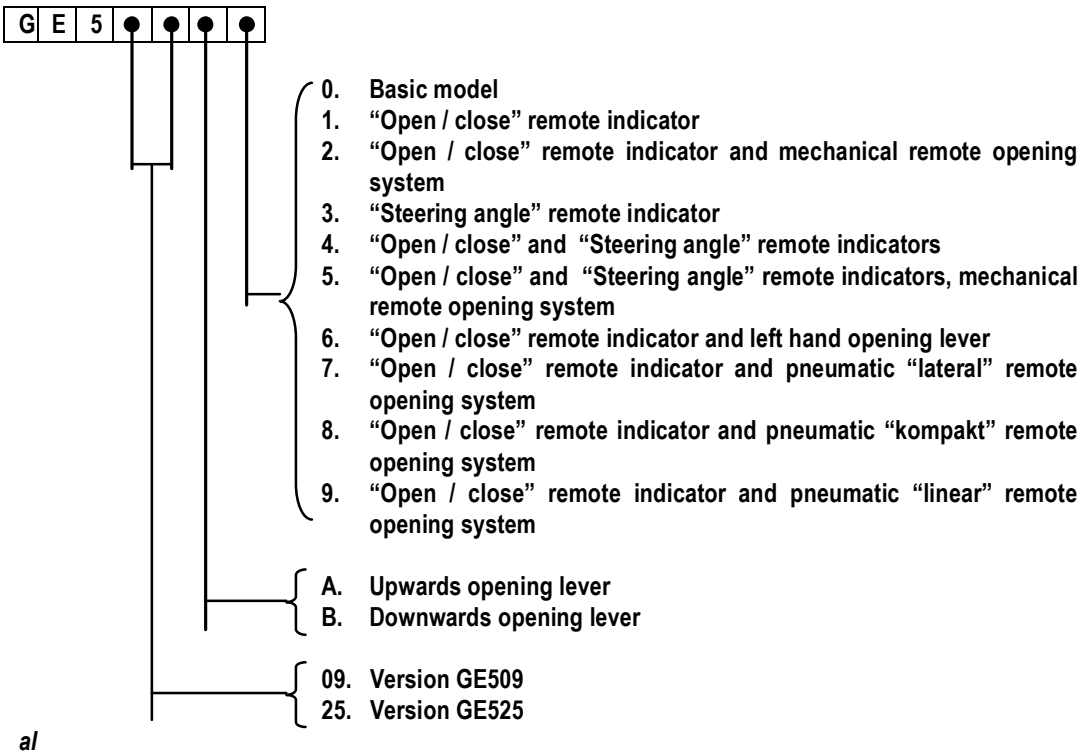
The drawbar eye suitable for E509 automatic coupling is free to move according to the requirements of the item 3.4, annex 5 of the R55.01 Regulation.

Coupling identification data

All the necessary data for the trailer coupling identification is found on the label attached to the auto-mechanism unit, in detail:

Type:	E509	
Homologation n°:	55R-011046	
D-Value:	200	kN
Dc-Value:	135	kN
S-Value:	1000 | 2500	kg
V-Value:	75 | 50	kN
Class:	C50-X	

Description of Versions and Models



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All the components are manufactured with certified materials; all the security components are identified by the production lot number and by the trade mark.

Measures against corrosion

All the metallic parts exposed to atmospheric agents are coated with a layer of paint, thickness 0.1 mm, which guarantees a resistance against salty fog corrosion equivalent of 250 hours.

MANUALS AND INSTRUCTIONS

Installation instructions (ref. Drawing *GE 50 000 dated: 02/05/13 revision T and GE 52 500 dated 07/02/14 revision A.)*

1. Remove tie rod nut pos.3;
2. Remove rear flange pos.4, rear rubber pos.8a and coupling flange pos.7a from tie rod shaft pos.25;
3. Insert coupling flange pos.7a into drawbeam hole from behind and fix it with 4 bolts;
4. Tight bolts (M20 / 8.8 minimum class) to 330 - 370 Nm locking torque (NOTE: use ONLY self locking nuts;
5. Insert tie rod pos.25 into coupling flange pos.7a;
6. Mount rear rubber pos.8a and rear flange pos.4;
7. Oil thread of tie rod pos.25, then tight by hand tie rod nut pos.3, aligning horizontally the coupling in respect to road plane;
8. Tight tie rod nut pos.3 using torque wrench to 550 – 700 Nm locking torque;
9. Fit split pin pos.2 and protection cap pos.1.

ATTENTION: Installation must be performed by skilled staff.

Instruction manual for installation use and maintenance will be supplied with each coupling

Flero, 08/05/2014