



THE UNITED KINGDOM VEHICLE APPROVAL AUTHORITY

COMMUNICATION CONCERNING THE APPROVAL GRANTED ⁽¹⁾/~~APPROVAL EXTENDED ⁽⁴⁾~~/
~~APPROVAL REFUSED ⁽⁴⁾~~/~~APPROVAL WITHDRAWN ⁽⁴⁾~~/~~PRODUCTION DEFINITELY
DISCONTINUED ⁽⁴⁾~~ OF A TYPE OF MECHANICAL COUPLING DEVICE OR COMPONENT,
PURSUANT TO REGULATION NO 55.01



Approval No: 55R-017172

Extension No: Not applicable

1. Trade name or mark of the device or component: V.Orlandi Spa
2. Manufacturer's name for the type of device or component: MV 501
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: 05 May 2015
8. Technical service responsible for conducting approval tests: TÜV SÜD Auto Service GmbH

EAR327615



9. Brief description: Non-standard automatic drawbar coupling, clevis type
- 9.1. Type and class of device or component: MV 501, S
- 9.2. Characteristic values:
- 9.2.1. Primary values:
 D: 190 kN Dc: 135 kN S: 1000 kg
 U: - tonnes V: 85 kN
 Alternative values: Not applicable
 D: - kN Dc: - kN S: - kg
 U: - tonnes V: - kN
- 9.3. For Class A mechanical coupling devices or components, including towing brackets:
 Not applicable
- Vehicle manufacturer's maximum permissible vehicle mass: - kg
- Distribution of maximum permissible vehicle mass between the axles: Not applicable
- Vehicle manufacturer's maximum permissible towable trailer mass: - kg
- Vehicle manufacturer's maximum permissible static mass on coupling ball: - kg
- Maximum mass of the vehicle, with bodywork, in running order, including coolant, oils, fuel, tools and spare wheel (if supplied) but not including driver: - kg
- Loading condition under which the tow ball height of a mechanical coupling device fitted to category M₁ vehicles is to be measured -see paragraph 2 of annex 7, appendix 1:
 Not applicable
- 9.4. For class B coupling heads, is the coupling head intended to be fitted to an unbraked O₁ trailer
 YES/NO⁽¹⁾ 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: 05 May 2015
- 15. Number of test report: 15-00220-CX-GBM
- 16. Approval mark position: On mechanism box side, near the operating handle, the label is riveted.
- 17. Reason(s) for extension of approval: Not applicable
- 18. Approval GRANTED/~~EXTENDED/REFUSED/WITHDRAWN~~⁽¹⁾

19. Place: BRISTOL

20. Date: 05 JUNE 2015

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° MV 501 00

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

0. GENERAL

- 0.1. Make (trade name of manufacturer):
V.ORLANDI Spa
- 0.2. Type and commercial description(s):
MV 501 Automatic Drawbar 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 CE-approval mark:
On mechanism box side, near the operating handle. The label is riveted.
See attached drawing n° MV 53 000 dated: 08/05/14 revision A.
- 0.8. Address of the plant(s) where the assembly takes place:
V.Orlandi Spa, Via Quinzano 3 - 25020 FLERO -BS- ITALY
Via Brolo 37 – 25075 NAVE –BS- ITALY

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

- 1.1. Detailed 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 S, MV 501
- 1.3. Maximum D-value (1): 190 kN
Maximum Dc-value (1) 135 kN
- 1.4. Maximum vertical load S at the coupling point (1): 1000 kg
- 1.5. Maximum load (U) at the fifth wheel coupling (1): Not applicable
- 1.6. Maximum V-value (1): 85 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:

See attached drawing n° MV 53 000 dated: 08/05/14 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):

Fixing at towing vehicle according to Annex 7, item 2.3, figure 32 and table 8 of ECE R55.01.

(1) If applicable

Flero, 5 May 2015



TECHNICAL DATA FOR MV501 AUTOMATIC DRAWBAR COUPLING

INTRODUCTION

Description of the coupling

Automatic drawbar coupling type MV 501 is designed for 68 mm Toroidal drawbar eyes (according to French Standard NF R41-102) suitable for truck drawbeams with 160 x 100 mm fixing hole pattern.

The dimensions of the coupling are according to this national standard in order to guarantee fully interchangeability with the existing standards. Due to this the approval class will be Class S.

There is a complete series of accessories which allows the use of these trailer couplings for different applications.

CHARACTERISTICS

Loads

The trailer coupling has been tested in following conditions:

Maximum D-value :	190 kN
Maximum Dc-value :	135 kN
Maximum vertical load S at the coupling point :	1000 kg
Maximum V-value :	85 kN

The trailer coupling can be fitted also to the trailer.

Mobility of the drawbar eye

The drawbar eye suitable for MV 50 trailer coupling is free to move in the trailer coupling as follows:

-vertically +/- 20°

-horizontally :

drawbar into coupling +/- 5°.

drawbar and coupling 360°.

-steering angle between the truck and the trailer +/- 90°.

Description of the versions and models

MV 50 coupling is available in the following versions:

-Version A: with the action lever upwards

-Version B: with the action lever downwards

These versions include the following models:

-0: basic model of the coupling

-1: coupling with open-close remote indicator

-2: coupling with open-close remote indicator and mechanical remote opening.

-3: coupling with turn-angle indicator.

-4: coupling with open-close remote indicator and turn-angle indicator.

-5: complete model of coupling with open-close remote indicator, mechanical remote opening

-7: complete model of coupling with open-close remote indicator, pneumatic remote opening

MV 501 00

Trailer coupling homologation data

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

Type: MV 50	Homologation n°:
D-Value:	190 kN
Dc-Value:	135 kN
Static vertical load:	1000 kg
V-Value:	85 KN
Class:	S

Coupling model (according to the foregoing paragraph).

Material

All the components are manufactured with certified materials; the security components, i.e. tie-rod, tie-rod nut, and the trailer pin 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

Fix the coupling body to the drawbeam of the truck by means of 4 bolts M20.
Tight the bolts at 320-350 Nm locking torque.

ATTENTION: Installation must be performed by skilled staff.

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

DRAWINGS LIST

Attached copy of the drawing list with specified date, modification level and material for each component.