

ITALIAN COMMENTS to RVFSR

Annex XXXIV, Appendix 1

Mechanical couplings for towed vehicles have been included in Annex XXXIV and EU type approval. See new table 2. Thus they should be clearly listed at the beginning of Appendix 1, making reference to relevant ISO standards.

Mechanical coupling types

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- Hitch rings according to **ISO 5692-1:2004** (50 mm hole, 30 mm ring diameter).
- Coupling rings according to **ISO 5692-2:2002** (40 mm socket).
- Swivel hitch rings according to **ISO 5692-3:2011**.
- Hitch rings according to **ISO 20019:2001** (50 mm hole centre, 30 to 41 mm ring diameter).
- Coupling device according to **ISO 24347:2005** (80 mm ball diameter).
- Drawbar eye according to **ISO 8755:2001** (40 mm hole).
- Drawbar coupling according to **ISO 1102:2001** (50 mm hole).

Kommentar [SP1]: ISO Definition. Or DRAWBAR EYES (R55 definition)?
Relevant also for other types!

Automatic couplings

Concerning automatic couplings (cylindrical and cambered locking pin), nothing has changed with respect to directive 2009/144/EC. However new Table 2 of Appendix 1, Annex XXXIV, is now making reference to ISO 6489-2 for automatic couplings. Comparing Figures 1b and 1c of ISO 6489-2 with ISO drawings, there is one dimensional difference. The tolerance of radius R is different: R 50 **0/+10** mm (ISO) instead of R 50 **1/+5** mm (EC directive). In the past this difference produced some mis-interpretations. In particular the key-point seems to be the possibility to connect automatic couplings with 50 mm hole rings. Such a connection is wrong, but it might be physically possible with a 60 mm radius. Discussion is relevant for both EU Regulation RVFSR and revision of ECE R 55.

Italian Manufacturers feels the need of more clarity on this difference. Is there a technical reason/justification for that? Proposal to discuss the issue within TFAC and define a common position among Manufacturers and Technical Services. Then this approach should be included in RVFSR and ECE R 55. Options on the table:

1. Leave everything as it is. But what about ECE R 55?
2. For the moment, keep the difference between ISO 6489-2 and EU regulations. For the future, take a decision (which one of the two?) and include it in ECE R 55.
3. Align everything with ISO 6489-2. Thus an amendment of both Regulation RVFSR and ECE R 55 is needed.
4. Align everything with current EU requirement. For the future, update ISO 6489-2 and ECE R 55 accordingly.

- 2) (pin 30) → compatible with ISO 5692-3, shape X (35 mm ring); ISO 5692-2:2002 (40 mm hole); ISO 8755:2001 (40 mm hole)
- 3) (pin 38) → compatible with ISO 5692-1:2004 (50 mm ring); ISO 5692-3:2011 shape Y (50 mm hole); ISO 20019:2001;
- 4) (pin 50) → compatible with ISO 5692-3:2011 shape Z (68 mm hole).

Table 2 – Compatibility

With the aforesaid amendments, new table 2 should be used to indicate proper compatibility between towing and towed vehicle. Even if not strictly related to type approval, it would be an international compatibility reference.

Italian proposal to amend current table 2:

Coupling component on the tractor	Coupling component on the towed vehicle
Corresponding to ISO 6489-1:2001 (hook type)	Corresponding to ISO 5692-1:2004 (hitch ring, 50 mm hole centre, 30 mm ring diameter) or to ISO 20019:2001 (hitch ring, 50 mm hole centre, 30 to 41 mm ring diameter) or to ISO 5692-3:2011 (swivel hitch rings) (only 50 mm hole, shape Y)
Corresponding to ISO 6489-5:2011 (no swivel clevis coupling)	Corresponding to ISO 5692-3:2011 (swivel hitch rings)
Corresponding to ISO 6489-2:2002 (hook clevis type)	Corresponding to ISO 5692-2:2002 (coupling ring, 40 mm socket) or to ISO 8755:2001 (40 mm drawbar coupling) or to ISO 1102:2001 (50 mm drawbar coupling) NOTE: compatible only with ISO 6489-2 shape A (NON automatic)
Corresponding to ISO 6489-3:2004 (drawbar)	Appropriate coupling type mentioned in this column that fits the drawbar
Corresponding to ISO 24347:2005 (ball type)	Corresponding to ISO 24347:2005 (80 mm ball diameter)
Corresponding to ISO 6489-4:2004 (piton type)	Corresponding to ISO 20019:2001 (hitch ring, 50 mm hole centre, 30 to 41 mm ring diameter) [NOTE to be added? ONLY up to 35 mm ring diameter;

Kommentar [SP2]: OK

Kommentar [SP3]: Not useful. Proposal to delete.

Kommentar [SP4]: Possible interference. Keeper height allowed from 56 to 66 mm. With minimum values some degrees of articulation are lost

	according to French national standard] or to ISO 5692-1:2004 (hitch ring, 50 mm hole centre, 30 mm ring diameter) or to ISO 5692-3:2011 (swivel hitch rings) (only 50 mm hole, shape Y)
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