



Kraftfahrt-Bundesamt

DE-24932 Flensburg

EG - TYPGENEHMIGUNGSBOGEN

EC TYPE-APPROVAL CERTIFICATE

Benachrichtigung über

- die Typgenehmigung

in Bezug auf die Verordnung (EG) Nr. 79/2009, nach Maßgabe der Verordnung (EU) Nr. 406/2010

Communication concerning the

- type-approval

with regard to Regulation (EC) No. 79/2009, as implemented by Regulation (EC) No. 406/2010

EG-Typgenehmigungsnummer: e1*79/2009*406/2010*00052*00

EC-Type Approval No.:

Grund der Erweiterung:

Reason for extension:

Entfällt

Not applicable

ABSCHNITT I SECTION I

0.1. Fabrikmarke (Firmenname des Herstellers):

Make (trade name of manufacturer):

Schwer Fittings GmbH

0.2. Typ:

Type:

u2 – Klemm Keilringverschraubungen

Betreffendes H₂-Bauteil:

H₂ component considered:

**Verbindungsteile der Klasse 0 zur Verwendung mit komprimiertem
(gasförmigem) Wasserstoff**

Fittings class 0 designed to use compressed (gaseous) hydrogen



Kraftfahrt-Bundesamt

DE-24932 Flensburg

2

Nummer der Genehmigung: e1*79/2009*406/2010*00052*00
Approval No.:

- 0.3. Merkmale zur Typidentifizierung, sofern am Bauteil vorhanden:
Means of identification of type, if marked on the component:
u2 – Klemm Keilringverschraubungen
- 0.3.1. Anbringungsstelle dieser Merkmale:
Location of that marking:
Siehe Punkt 0.7 des Beschreibungsbogens
See item 0.7 of the information document
- 0.5. Name und Anschrift des Herstellers:
Name and address of manufacturer:
Schwer Fittings GmbH
DE-78588 Denkingen
- 0.7. Bei Bauteilen und selbstständigen technischen Einheiten: Anbringungsstelle und Anbringungsart des EG-Typgenehmigungszeichens:
In the case of components and separate technical units, location and method of affixing of the EC approval mark:
Siehe Punkt 0.7 des Beschreibungsbogens
See item 0.7 of the information document
- 0.8. Name(n) und Anschrift(en) der Fertigungsstätte(n):
Name(s) and address(es) of assembly plant(s):
Schwer Fittings GmbH
DE-78588 Denkingen
- 0.9. (Ggf.) Name und Anschrift des Bevollmächtigten des Herstellers:
Name and address of the manufacturer's representative (if any):
Entfällt
Not applicable

ABSCHNITT II SECTION II

1. Zusätzliche Angaben (soweit erforderlich): **Siehe Anlage**
Additional information (where applicable): **See Appendix**
2. Technischer Dienst, der die Prüfungen für die Genehmigung durchführt:
Technical service responsible for carrying out the tests:
TÜV SÜD Auto Service GmbH
DE-80686 München
3. Datum des Prüfberichts des Technischen Dienstes:
Date of test report:
05.07.2022



Kraftfahrt-Bundesamt

DE-24932 Flensburg

3

Nummer der Genehmigung: e1*79/2009*406/2010*00052*00
Approval No.:

4. Nummer des Prüfberichts des Technischen Dienstes:
Number of test report:
22-00003-IS-MUC-00
5. (Gegebenenfalls) Bemerkungen: **Siehe Anlage:**
Remarks (if any): **See Appendix:**
6. Ort: **DE-24932 Flensburg**
Place:
7. Datum: **05.07.2022**
Date:
8. Unterschrift: **Im Auftrag**
Signature:

Tag Aldeen Hussein Agha



9. Die Typgenehmigungsunterlagen, hinterlegt bei der zuständigen Behörde, die die Typgenehmigung erteilt hat, sind auf Anfrage erhältlich.
The type-approval file deposited at the Administrative Service having delivered the type-approval, may be obtained.

Verzeichnis:

List of documents:

1. Anlage zum EG-Typgenehmigungsbogen
Appendix to the EC type-approval certificate
2. Inhaltsverzeichnis zu den Beschreibungsunterlagen
Index to the information package
3. Beschreibungsunterlagen
Information package



Test Report No.:	22-00003-IS-MUC-00	July 5, 2022
Manufacturer:	Schwer Fittings GmbH	IS-FM
Type:	u2 – Klemm Keilringverschraubungen	Page 1 of 4

TEST REPORT

22-00003-IS-MUC-00

About the Tests of fittings for Hydrogen-Powered Motor Vehicles

According to:

REGULATION (EC) No 79/2009

OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
of 14 January 2009
on type-approval of hydrogen-powered motor vehicles

and

COMMISSION REGULATION (EU) No 406/2010
of 26 April 2010
implementing Regulation (EC) No 79/2009 of the European Parliament and of the Council on
type-approval of hydrogen-powered motor vehicles

Approval status	
<input checked="" type="checkbox"/>	Granting of a type approval
<input type="checkbox"/>	Extension/correction to type approval no.



Test Report No.:	22-00003-IS-MUC-00	July 5, 2022
Manufacturer:	Schwer Fittings GmbH	IS-FM
Type:	u2 – Klemm Keilringverschraubungen	Page 2 of 4

I. General

The Specific Component:

1.	H2-component considered <input checked="" type="checkbox"/> Designed to use CGH <input type="checkbox"/> Designed to use LH2	fitting
2.	Make:	Schwer Fittings GmbH
3.	Type: Versions or variants:	u2 – Klemm Keilringverschraubungen See "List of Variants" in Annex 2
4.	Location of type marking	Hexagon
5.	Name and address of the manufacturer:	Schwer Fittings GmbH Hans Schwer Platz 1 78588 Denkingen
6.	Location and method of affixing of the EC-approval mark	Laser graving at hexagon
7.	Name and address of the manufacturer's representative (if any):	Not applicable
8.	Name and Address of Manufacturing plant:	Schwer Fittings GmbH Hans Schwer Platz 1 78588 Denkingen
9.	Operating Conditions:	Nominal working pressure: 35 MPa @ 15°C Operating temperature: -40°C to +85°C
10.	Filling or Duty cycles	50.000

was tested according to the requirements of the mentioned test basis.



Test Report No.:	22-00003-IS-MUC-00	July 5, 2022
Manufacturer:	Schwer Fittings GmbH	IS-FM
Type:	u2 – Klemm Keilringverschraubungen	Page 3 of 4

II. Test Samples, Performed Tests and Test Results

The test samples, the performed tests and the test results are described and summarized in Annex 1 – Test Results.

III. Information Folder

This Test Report is based on the following information (refer to Annex 2):

- Application for the issue of a type approval by Schwer Fittings GmbH dated 29.06.2022
- Information Document acc. to Regulation (EU) 406/2010, Annex II, Part I

IV. Approval History (in case of extension)

	Content of extension(s)	Report No. and Date
Initial Component Testing	-	

V. Statement of Conformity

The mentioned information folder and the type described therein are in accordance with the test basis mentioned above. The worst-case was selected in accordance with document "Requirements for Test Reports (AS-PB-T-02)".

The test report may be reproduced and published in full and by the client only. It can be reproduced partially with the written permission of the test laboratory only.



Test Report No.:
Manufacturer:

22-00003-IS-MUC-00
Schwer Fittings GmbH

July 5, 2022
IS-FM
Page 4 of 4

Type:

u2 – Klemm Keilringverschraubungen

TÜV SÜD Auto Service GmbH is designated as Technical Service by:

Genehmigungsbehörde <i>Approval authority</i>	Land <i>Country</i>	Registriernummer <i>Registration number</i>
Kraftfahrt-Bundesamt (KBA)	Deutschland <i>Germany</i>	KBA-P 00100-10
Vehicle Certification Agency (VCA)	Vereinigtes Königreich <i>United Kingdom</i>	VCA-TS-006
Vehicle Safety Certification Center (VSCC)	Taiwan/Taiwan	DE04-06-2
Approval Authority of the Netherlands (RDW)	Niederlande <i>The Netherlands</i>	RDWT-082-xx
National Standards Authority of Ireland (NSAI)	Irland <i>Ireland</i>	Technical Service Number: 49
Société Nationale de Certification et d'Homologation s.à r.l.	Luxemburg <i>Luxembourg</i>	13/B(g)
Swedish Transport Agency	Sweden	TT 0024

Munich,
July 5, 2022


Florian Michl
The Authorized Signatory

Annexes:

- Annex 1 - Test Results
- Annex 2 - List of Variants
- Annex 3 – Information Folder (see chapter II)