

EU TYPE-APPROVAL CERTIFICATE

Communication concerning: -EU type-approval⁽¹⁾
 -~~Extension of EU type approval⁽¹⁾~~
 -~~Refusal of EU type approval⁽¹⁾~~
 -~~Withdrawal of EU type approval⁽¹⁾~~

of a type of ~~component~~/separate technical unit⁽¹⁾⁽⁶⁾ noise-abatement device
 with regard to Annex(es) IX ^(a) to Commission Delegated Regulation (EU) No 134/2014 ~~(and Annex(es) ...^(a) to~~
~~Commission Delegated Regulation (EU) No .../...~~⁽¹⁾, as last amended by (Commission Delegated) ⁽¹⁾ Regulation (EU)
 No 2018/295 ⁽¹⁾⁽⁶⁾

EU type-approval number⁽¹⁾: **e24*134/2014*2018/295G*00272*00**

Reason for extension⁽¹⁾: - N/A

SECTION I

- | | |
|---|---|
| 0.7. Make(s) (trade name(s) of manufacturer): | REMUS opt. Sebring |
| 0.8. Type: | NXT02 |
| 0.8.1. Commercial name(s) (if available): | N/A |
| 0.9. Company name and address of the manufacturer: | Remus Innovation
Forschungs- und
Abgasanlagen Produktions
GmbH
Dr. Niederdorferstraße 25
A-8572 Bärnbach |
| 0.9.1. Name(s) and address(es) of assembly plant(s): | Remus Innovation
Forschungs- und
Abgasanlagen Produktions
GmbH
Dr. Niederdorferstraße 25
A-8572 Bärnbach

Sebring Technology GmbH
Ruhmannstraße 11
A-8570 Voitsberg |
| 0.9.2. Name and address of the manufacturer's representative (if any): | N/A |
| 0.10. In the case of separate technical unit, vehicle(s) for which is intended for ^(b) : | |
| 0.10.1. Type ^(c) | 2R99 |
| 0.10.2. Variant(s) ^(c) : | 0E21 |
| 0.10.3. Version(s) ^(c) : | 0E24 |
| 0.10.4. Commercial name(s) (if available): | S 1000 RR |
| 0.10.5. Category, subcategory and sub-subcategory of vehicle (3): | L3e-A3 |

EU type-approval number⁽¹⁾:

e24*134/2014*2018/295G*00272*00

SECTION II

1. Technical service responsible for carrying out the tests:

**TÜV AUSTRIA
AUTOMOTIVE GMBH
Deutschstraße 10
1230 Wien/Austria**

2. Date of test report(s):

11.02.2020

3. Number of test report(s):

19-TAHO-0164

4. Remarks (see addendum):

N/A

5. Restrictions of validity ⁽¹⁾⁽⁴⁾:

N/A

6. Waivers applied ⁽¹⁾⁽⁴⁾:

N/A

Place:

Dublin

Date:

26th February, 2020.

Name and signature
(or visual representation of an
'advanced electronic signature'
according to Directive 1999/93/EC,
including data for verification):




Attachments:

- Information package
- Test report

NB:

— If this model is used for type-approval of a component or separate technical unit as an exemption for new technology or new concept, pursuant to Article 40 of Regulation (EU) No 168/2013, the heading of the certificate shall read 'EU PROVISIONAL TYPE-APPROVAL CERTIFICATE VALID ONLY ON THE TERRITORY OF ... ⁽⁴⁾', The provisional type approval certificate shall also specify the restrictions that have been imposed as to its validity and the waivers which have been applied in accordance with Article 30⁽⁴⁾ of Regulation (EU) No 168/2013.

Explanatory notes relating to Appendix 5

(Footnotes and explanations not to be stated on the type-approval certificate)

⁽⁰⁾ Indicate the component/separate technical unit according to first column of Table 1 in point 6 of Annex VII (e.g. devices to prevent unauthorised use)

⁽¹⁾ Delete where not applicable.

⁽³⁾ Classified according to Article 4 of and Annex I to Regulation (EU) No 168/2013, the coding shall be indicated, e.g. "L3e-A1E" for a low-performance Enduro motor-cycle.

⁽⁴⁾ Indicate the Member State.

⁽⁵⁾ Applicable only for type-approval of a component or separate technical unit as an exemption for new technology or new concept, pursuant to Article 40 of Regulation (EU) No 168/2013

⁽⁶⁾ Indicate the latest amendment of the Commission Delegated Regulation according to the amendment applied for the EU type-approval.

^(a) The Roman numeral of the relevant Annex to the Commission Delegated Regulation or multiple Roman numerals of the relevant Annexes to the same Commission Delegated Regulation.

^(b) Provide this information for each vehicle type.

^(c) Indicate the alphanumeric code Type-Variant-Version or 'TVV' allocated to each type, variant and version as set out in point 2.3 of Part B of Annex I.



ADDENDUM TO THE EU TYPE-APPROVAL CERTIFICATE WITH EU TYPE-APPROVAL NUMBER
e24*134/2014*2018/295G*00272*00

- | | |
|---|-------------------------------|
| 1. Restriction of use of the ⁽⁰⁾ ⁽¹⁾ : | Noise-abatement device |
| ⁽²⁾ : | N/A |
| | |
| 2. Special conditions for the mounting of the ⁽⁰⁾ ⁽¹⁾ : | Noise-abatement device |
| ⁽²⁾ : | N/A |
| | |
| 3. Remarks ⁽⁰⁾ : | N/A |

Explanatory notes relating to Appendix 6

(Footnotes and explanations not to be stated on the addendum to the type-approval certificate)

⁽⁰⁾ Delete where not applicable.

⁽¹⁾ Identify the component or separate technical unit according to the first column of Table 1 in point 6 of Annex VII to this Regulation (e.g. devices to prevent unauthorised use).

⁽²⁾ In accordance with Article 31(4) of Regulation (EU) No 168/2013, indicate the restrictions of use and the special conditions for the mounting of the component/separate technical unit.

Index to the Information Package

Date of issue: **26th February, 2020.**

Date of latest amendment: **N/A**

Reason for extension/revision: **N/A**

1. Additional conditions, and advisory
notes on legal alternatives

2. Test report(s)

- numbers(s): **19-TAHO-0164**

- date of issue: **11.02.2020**

- date of latest amendment: **N/A**

3. Information document

- number(s): **NXT02/00**

- date of issue: **27.11.2019**

- date of latest amendment: **N/A**

Documentation: **18 pages**



EU type-approval number:

e24*134/2014*2018/295G*00272*00

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.

Manufacturer : Remus Innovation Forschungs- und Abgasanlagen Produktions GmbH
Type : NXT02

Test Report

No. 19-TAHO-0164

regarding the testing of a non-original exhaust system, or individual parts of that system as a technical unit, according with Regulation (EC) 134/2014 Annex IX 12.2013 last amendment by Regulation (EC) 2018/295 dated 15.12.2017

☒ **New Application**

☐ ~~Extension No.~~

Name and address of the Technical Service : TÜV AUSTRIA AUTOMOTIVE GmbH
Deutschstraße 10
1230 Vienna
Austria

Name and address of the client: : Remus Innovation Forschungs- und
Abgasanlagen Produktions GmbH
Dr. Niederdorferstraße 25
8572 Bärnbach
Austria

0. General information

0.1 Trademark(s) : REMUS; SEBRING

0.2 Type : NXT02

0.2.1 Variant : --

0.2.2 Version : --

0.3 Vehicle class : L3e-A3

0.5 If relevant, name and address of the manufacturer's agent : N/A

0.6 Number of the description document : NXT02/00

Date of issue : 25.11.2019

Manufacturer : Remus Innovation Forschungs- und Abgasanlagen Produktions GmbH
Type : NXT02

1. Information on the test specimen

1.1 Type of engineering unit : Technical unit for noise reduction,
consisting of replacement silencer(s),
see in information document NXT02/00

1.1.2 Position and direction of the exhaust outlet : Vehicle rear, right hand side

2. **Motorcycle Type / Trademark for which the silencer is intended for** : **see in information document NXT02/00**

3. Test Record

3.0 The tests were done on the following vehicle(s) : refer to annex 2 of Test Report

3.1 Test vehicles

3.1.1 (0.1) Trademark : BMW

3.1.2 (0.2) Trade name / Type / Version / Variant : BMW S 1000 RR / 2R99 / 0E21 / A

3.1.3 (0.5) Manufacturer : Bayerische Motoren Werke AG
DE-80788 Muenchen

3.1.3.1 Approval number : e1*168/2013*00091

3.1.3.2 Addendum or supplement : 01

3.1.4 Vehicle identification number : WB10E2100LZJ92190

3.1.5 Year of manufacture : 2019

3.1.6 Recorded mileage : 6499 [km]

3.1.7 Vehicle length : 2073 [mm]

3.1.8 (2.1) Mass of the vehicle ready to ride
without rider : 197 [kg]

3.1.9 Mass of vehicle in running order,
together with rider : 274 [kg]

3.1.10 Maximum permissible gross weight : 407 [kg]

3.2 (3) Prime mover

3.2.1 (3.0) Manufacturer : Bayerische Motoren Werke AG

(3.1) Trademark : N/A

Manufacturer : Remus Innovation Forschungs- und Abgasanlagen Produktions GmbH
Type : NXT02

3.2.2	(3.1.1)	Type	:	A10A10A		
3.2.3	(3.2.1.3)	Engine capacity	:	999 [cm³]		
3.2.4	(3.2.1.7)	Rated power	:	152 [kW] @ 13500 [min-1]		
3.3	(4)	Power transmission				
3.3.1	(4.1)	System drawing for the power transmission	:	see WVTA, see 3.1.3.1		
3.3.2	(4.2)	Type of power transmission	:	manual		
3.3.3.1	(4.3)	Clutch	:	wet multi plate clutch		
3.3.4	(4.4)	Gearbox				
3.3.5	(4.4.1)	Type	:	mechanic		
3.3.6	(4.4.2)	Method of operation	:	manual		
3.3.7	(4.5)	Gear ratios				
		Primary (gear stages)	I	:	4,373	
			II	:	3,454	
			III	:	2,853	
			IV	:	2,478	
			V	:	2,247	
			VI	:	2,089	
			VII	:	--	
			VIII	:	--	
		Secondary	:	2,647		
3.3.8	(4.6)	Maximum speed	:	306 [km/h]		
3.4	(5)	Wheel suspension				
3.4.1		Tires				
				Axle 1		Axle 2
				120/70 ZR17		190/55 ZR17
				58W		75W
3.5		Assembly of the exhaust system				
						see Technical information folder, Annex 1

Manufacturer : Remus Innovation Forschungs- und Abgasanlagen Produktions GmbH
Type : NXT02

4. Test Results

- | | | |
|-----|-------------------------|--|
| 4.1 | Noise Level Test | : The requirements of Regulation VO (EU) 134/2014 (UN-R41.04) were satisfied. |
| 4.2 | Maximum Power Test | : The measured maximum power and its associated engine speed are within the tolerance range of $\pm 5\%$ of the values measured with the original exhaust system. |
| 4.3 | Maximum Speed Test | : The maximum speed measured is within the tolerance range of $\pm 5\%$ of the values measured with the original exhaust system. |
| 4.4 | Pollutant Emission Test | : The type approval values for the vehicle in terms of pollutant emissions are also achieved with the non-original exhaust system/technical unit described here. The requirements of Regulation VO (EU) 134/2014 were satisfied. |
| 4.5 | Scope of Use | : On the basis of the measurements taken on the original and non-original exhaust technical units, it may be considered that Regulation VO (EU) 134/2014 is satisfied. On the basis of the measurements taken using the vehicle/s named above, the motorcycles listed in Annex 2 may also be included in the scope of use. |
| 4.6 | Summary | : The general specifications according to the Regulation VO (EU) 134/2014 were examined and were satisfied by the non-original exhaust system / technical unit. |

Manufacturer : Remus Innovation Forschungs- und Abgasanlagen Produktions GmbH
Type : NXT02

5. Annexes

Annex 1	Scope of use	1 page
Annex 2	Test results of sound measurement	3 pages
Annex 3	Information folder and installation instruction Number: NXT02/00	9 pages

6. Summary

The description document quoted above, and the type of non-original exhaust system described therein, are in accordance with Regulation VO (EU) 134/2014.
There are no technical objections to the grant of an EC type approval.

Regarding the required level of performance to be achieved, the tested items were representative for the type to be approved.
The tests were carried out in accordance with the relevant requirements of DIN EN ISO/IEC 17025:2017.

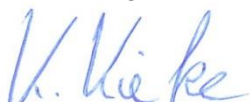
This test report comprises sheets 1 to 5 and Annexes listed at paragraph 5. It is only valid as a unit.

Vienna, 11.02.2020

TÜV AUSTRIA AUTOMOTIVE GMBH

Designated by the National Standards Authority of Ireland (NSAI)

Test engineer


Karl KIEKE, M.Sc.



TÜV AUSTRIA AUTOMOTIVE GMBH

A partial duplication or reproduction of that document requires the written consent of the TÜV AUSTRIA AUTOMOTIVE GMBH
Testing, inspection and surveillance activities performed in accordance with QM System of

TÜV AUSTRIA AUTOMOTIVE GMBH
Page 5 of 5

Deutschstrasse 10
1230 Wien/Vienna
Österreich/Austria
☎ +43(0)1 61091-0
✉ automotive@tuv.at

e24*134/2014*2018/295G*00272*00

Manufacturer : Remus Innovation Forschungs- und Abgasanlagen Produktions GmbH
Type : NXT02

Annex 1: Scope of use

Manufacturer: BAYER.MOT.WERKE-BMW									
Commercial name	Type	Variant	Version	Approval No.	Eng. Type*	Stroke / Ignition	Eng. Cap. [cm3]	Rated Eng. Power [kW / min-1]	Other Determining Features
S 1000 RR	2R99	0E21 0E24	A	e1*168/2013*00091*..	A10A10A	4 Stroke / PI	999	152/13500	Slip on system, see technical information system*)

*) system with original catalyst and flap control unit

Manufacturer : Remus Innovation Forschungs- und Abgasanlagen Produktions GmbH
Type : NXT02

Test location	Remus Innovation Forschungs- und Abgasanlagen Produktions GmbH Dr. Niederdorferstraße 25 AT 8572 Bärnbach		
Test date	14.11.2019		
Meteorological data	Temperature	5,9 [°C]	
	Air pressure	962 [hPa]	
	Wind speed	1,4 [m/s]	
	Humidity	79 [%]	
	Ambient noise	51,5 [da(A)]	

Test Vehicle: BMW 2R99, VIN: WB10E2100LZJ92190

Power to Mass Ratio index (PMR)	558,82	$l_{ref} = 2,073$ [m]	$L_{PA} = 0$ [m]	Test mass (m_t) = 197 [kg]
Target acceleration [m/s ²]	$a_{urban\ ref}$	PMR > 50	$a_{urban\ ref} = 1,28 \times \log_{10} (PMR) - 1,19$	2,33 [m/s ²]
Reference acceleration [m/s ²]	$a_{wot\ ref}$	PMR > 50	$a_{wot\ ref} = 3,33 \times \log_{10} (PMR) - 4,16$	4,99 [m/s ²]
Partial power factor	1 gear tested	$k_p = 1 - (a_{urban\ ref} / a_{wot\ ref})$		0,533

Vehicle	Sound level values [dB(A)]							
	Moving vehicle					Stationary vehicle		
	Gear(s)	L_{Urban} type approval [dB(A)]	$L_{Urban\ OEM}$ [dB(A)]	$L_{Urban\ replacement}$ [dB(A)]	$L_{Urban\ Limit}^{*)}$ [dB(A)]	$L_{Stationary}$ type approval [dB(A) @ min ⁻¹]	OEM measured [dB(A) @ min ⁻¹]	replacement measured [dB(A) @ min ⁻¹]
1	3	77	76,6	77,2	77	98 @ 6750	98 @ 6750	98 @ 6750

^{*)} limit value of directive which was valid when vehicle type approval was issued

TÜV AUSTRIA AUTOMOTIVE GMBH

A partial duplication or reproduction of that document requires the written consent of the TÜV AUSTRIA AUTOMOTIVE GMBH
Testing, inspection and surveillance activities performed in accordance with QM System of
TÜV AUSTRIA AUTOMOTIVE GMBH
Page 1 of 3

Deutschstrasse 10
1230 Wien/Vienna
Österreich/Austria
☎ +43(0)1 61091-0
✉ automotive@tuv.at

Manufacturer : Remus Innovation Forschungs- und Abgasanlagen Produktions GmbH
Type : NXT02

Test Vehicle: BMW 2R99, VIN: WB10E2100LZJ92190

Sound level moving vehicle

L _{wot} Gear: 3 V _{pp} = 50 [km/h]							
	V _{AA}	V _{PP}	V _{BB}	a _{wot} AA-BB	L _{wot} left	L _{wot} right	L _{wot} max
	[km/h]	[km/h]	[km/h]	[m/s²]	[dB(A)]	[dB(A)]	[dB(A)]
1 st Test	37,6	50,1	65,5	5,03	78,7	80,4	
2 nd Test	38,1	50,2	66,1	5,10	78,6	80,4	
3 rd Test	38,5	50,6	65,8	4,98	79,7	79,9	
Average Ø	38,1	50,3	65,8	5,03	79,0	80,2	80,2

L _{crs} Gear: 3 V _{pp} = 50 [km/h]							
	V _{AA}	V _{PP}	V _{BB}		L _{crs} left	L _{crs} right	L _{crs} max
	[km/h]	[km/h]	[km/h]		[dB(A)]	[dB(A)]	[dB(A)]
1 st Test	50,2	50,4	50,8		74,9	74,9	
2 nd Test	49,6	50,2	50,7		74,9	74,2	
3 rd Test	50,2	50,1	50,1		74,0	75,1	
Mittelwert Average Ø	50,0	50,2	50,5		74,6	74,7	74,7

L _{urban}		L _{urban} [dB(A)]
Sound level L _{urban}	$L_{urban} = L_{wot} - k_p * (L_{wot} - L_{crs})$	77,2

TÜV AUSTRIA AUTOMOTIVE GMBH

A partial duplication or reproduction of that document requires the written consent of the TÜV AUSTRIA AUTOMOTIVE GMBH
Testing, inspection and surveillance activities performed in accordance with QM System of
TÜV AUSTRIA AUTOMOTIVE GMBH
Page 2 of 3

Deutschstrasse 10
1230 Wien/Vienna
Österreich/Austria
☎ +43(0)1 61091-0
✉ automotive@tuv.at

e24*134/2014*2018/295G*00272*00

Manufacturer : Remus Innovation Forschungs- und Abgasanlagen Produktions GmbH
Type : NXT02

Sound level stationary vehicle

Test results	Vehicle Type Approval	Test with OEM silencer	Test with replacement silencer	Target engine speed
	[dB(A)]	[dB(A)]	[dB(A)]	[min ⁻¹]
1 st Test	98	97,5	97,8	6750
2 nd Test		97,9	97,3	
3 rd Test		97,3	97,9	
Test result		98	98	

ASEP test

Test	Gear	n _{AA} [min ⁻¹]	v _{AA} [km/h]	n _{PP} [min ⁻¹]	v _{PP} [km/h]	n _{BB} [min ⁻¹]	v _{BB} [km/h]	ASEP noise level [dB(A)]	ASEP noise limit [dB(A)]
1 st ref.	3	2562	37,1	3384	50,1	4319	63,0	79,4	84,4
2 nd ref.	2	4234	57,2	5303	68,6	6401	86,1	92,4	94,0
1 st add.	3	2844	45,9	3526	57,3	4322	68,7	81,2	85,1
2 nd add.	4	2755	50,6	3268	59,5	3766	69,3	79,8	83,8



Beschreibungsmappe Information folder

Beschreibungsmappe Nr. NXT02/00 für die EU-Typgenehmigung einer lärm mindernden Einrichtung als selbständige technische Einheit (STE) gemäß Artikel 27 der Verordnung (EU) Nr. 168/2013	Datum / date 27.11.2019 geändert / <i>modified</i>
Information folder No. NXT02/00 relating to type-approval of a noise-abatement device as a separate technical unit (STU) according to article 27 of the Regulation (EU) no. 168/2013	Blatt 1 von 1 / Sheet 1 of 1

Inhaltsverzeichnis / *table of contents:*

	Zeichnungs-Nr. <i>Drawing – no.</i>	Datum <i>date</i>
Beschreibungsbogen / <i>Information document</i>	NXT02/00	25.11.2019
Zeichnung Schalldämpfer / <i>Drawing of silencer</i>	19ESD11251.1	25.11.2019
Stückliste / <i>Parts list</i>	19ESD11251.2	25.11.2019
Zeichnung Gesamtanlage / <i>Drawing noise reduction system</i>	19ESD11251.3	25.11.2019
Montageanleitung / <i>Mounting instructions</i>	BMW S1000 RR	

Ort / *place:* Bärnbach

Datum / *date:* 27.11.2019

Unterschrift / *signature*

Name und Stellung im Unternehmen /

Name and position in the company:

Stephan Zöchling, CEO

Beschreibungsbogen Nr. NXT02/00 für die EU-Typgenehmigung einer lärm mindernden Einrichtung als selbständige technische Einheit (STE) gemäß Artikel 27 der Verordnung (EU) Nr. 168/2013	Datum / <i>date</i> 25.11.2019 geändert / <i>modified</i>
Information document No. NXT02/00 <i>relating to EU type-approval of a noise-abatement device as a separate technical unit (STU) according to article 27 of the Regulation (EU) no. 168/2013</i>	Blatt 1 von 3 / Sheet 1 of 3

B. Allgemeine Angaben zu Systemen, Bauteilen und selbständigen technischen Einheiten
General information concerning systems, components or separate technical units

- 0.7. **Fabrikmarke(n)**
Trade mark(s) : REMUS ww. / *altern.* Sebring
- 0.8. **Typ**
Type : NXT02
- 0.8.1. Handelsname(n)
Commercial name(s) : keiner / *no*
- 0.8.2. Typgenehmigungsnummer(n)
Type-approval number(s) : e1*168/2013*00091*..
- 0.8.3. Typgenehmigung(en) erteilt am
Type-approval(s) issued on : nicht bekannt / *not known*
- 0.9. **Firmenname und Anschrift des Herstellers**
Company name and address of manufacturer : Remus Innovation Forschungs- und
Abgasanlagen Produktions GmbH
Dr. Niederdorferstraße 25
A-8572 Bärnbach
- 0.9.1. Name(n) und Anschrift(en) der Fertigungstätte(n)
Name(s) and address(es) of assembly plants : Remus Innovation Forschungs- und
Abgasanlagen Produktions GmbH
Dr. Niederdorferstraße 25
A-8572 Bärnbach
Sebring Technology GmbH
Ruhmannstraße 11
A-8570 Voitsberg
- 0.9.2. Name und Anschrift des Bevollmächtigten des
Herstellers
*Name and address of manufacturer's authorised
representative* : nicht zutreffend / *not applicable*
- 0.10. **Fahrzeug(e), für welche(s) das System / die selbständige technische Einheit bestimmt ist**
Vehicle(s) for which the system / separate technical unit is intended for
- 0.10.1. Typ / *Type* : 2R99
- 0.10.2. Variante / *Variant* : 0E21
0E24
- 0.10.3. Version / *Version* : A
- 0.10.4. Handelsname(n) / *Commercial name(s)* : S 1000 RR
- 0.10.5. Klasse, Unterklasse, Unter-Unterkategorie des
Fahrzeuges / *Category, subcategory and
sub-subcategory* : L3e-A3

Beschreibungsbogen Nr. NXT02/00 für die EU-Typgenehmigung einer lärm mindernden Einrichtung als selbständige technische Einheit (STE) gemäß Artikel 27 der Verordnung (EU) Nr. 168/2013	Datum / <i>date</i> 25.11.2019 geändert / <i>modified</i>
Information document No. NXT02/00 <i>relating to EU type-approval of a noise-abatement device as a separate technical unit (STU) according to article 27 of the Regulation (EU) no. 168/2013</i>	

C. **Allgemeine Angaben zu Systemen, Bauteilen und selbständigen technischen Einheiten des Fahrzeugs**
General information concerning vehicle, systems, components or separate technical units

1. **Allgemeine Baumerkmale**
General Constructions Characteristic

1.8 **Leistung u. Antriebsart / Propulsion unit performance**

- 1.8.1. Angegebene Höchstgeschwindigkeit des Fahrzeugs
Declared maximum vehicle speed : 306 km/h
- 1.8.2. Bauartbedingte Höchstgeschwindigkeit des Fahrzeugs km/h u. Gang in dem diese erreicht wird
Maximum design vehicle speed siehe 1.8.1 / 6. Gang
km/h and gear in which it is reached : Please refer to 1.8.1 / 6th gear
- 1.8.3. Maximale Nutzleistung des Verbrennungsmotors bei Luft / Kraftstoff-Verhältnis
Maximum net power combustion engine at A/F ratio : Variant 0E21: 152 KW / 13500 min-1
Variant 0E24: 152 KW / 13500 min-1
A/F ratio not listed in type approval documents
- 1.8.4. Maximales Nutzdrehmoment des Verbrennungsmotors bei Luft / Kraftstoff-Verhältnis
Maximum net power combustion engine at A/F ratio : Variant 0E21: 113 Nm / 11000 min-1
Variant 0E24: 113 Nm / 11000 min-1
A/F ratio not listed in type approval documents
- 1.8.5. Maximale Nenndauerleistung den Elektromotors (Leistung über 15/30⁽⁴⁾ Minuten⁽²⁷⁾)
Maximum continuous-rated power electrick motor : N/A
15/30⁽⁴⁾ minutes power⁽²⁷⁾
- 1.8.6. Maximales Nenn-Dauerdrehmoment des Elektromotors
Maximum continuous-rated torque electric motor : N/A
- 1.8.7. Maximale Dauer-Gesamtleistung des Antriebs (der Antriebe) bei Luft/ Kraftstoff-Verhältnis
Maximum continuous total power for propulsion at A/F ratio : N/A
- 1.8.8. Maximales Dauer-Gesamtdrehmoment des Antriebs (der Antriebe) bei Luft/ Kraftstoff-Verhältnis
Maximum continuous total torque for propulsion at A/F ratio : N/A
- 1.8.9. Maximales Spitzenleistung des Antriebs (der Antriebe) bei Luft/ Kraftstoff-Verhältnis
Maximum peak power for propulsion(s) at A/F ratio : N/A

Beschreibungsbogen Nr. NXT02/00 für die EU-Typgenehmigung einer lärm mindernden Einrichtung als selbständige technische Einheit (STE) gemäß Artikel 27 der Verordnung (EU) Nr. 168/2013	Datum / date 25.11.2019 geändert / modified
Information document No. NXT02/00 relating to EU type-approval of a noise-abatement device as a separate technical unit (STU) according to article 27 of the Regulation (EU) no. 168/2013	
	Blatt 3 von 3 / Sheet 3 of 3

4.0 Allgemeine Angaben zu Umweltverträglichkeit und Antriebsleistung
General information on environmental and propulsion performance

4.0.1. Umwelanforderungsstufe / *Environmental step* : Euro 4

4.0.2. Geräuschpegel / *Sound level*

4.02.1 Standgeräusch / *Stationary* : Variant 0E21: 98 dB(A) / 6750 U/min
Variant 0E24: 98 dB(A) / 6750 U/min

4.02.2 Fahrgeräusch / *Drive-by* : Variant 0E21: 77 dB(A)
Variant 0E24: 77 dB(A)

4.4. Zusätzliche Angaben zu Umweltverträglichkeit und Antriebsleistung
Additional information on environmental and propulsion unit performance

4.4.4. Ergänzende Beschreibung gemäß der UNECE-Regelung Nr. 92
Supplementary description in accordance with UN Regulation No 92

Krafttrad / *Motorcycle*

Fabrikmarke (Firmenname des Herstellers) /
Make (trade name of manufacturer) : BMW

EU-Typgenehmigungsnummer /
EU Type-approval No. : e1*168/2013*00091*..

Ab Baujahr / *From model-year* : 2019

Motor / *engine*

Baumusterbezeichnung / *Engine code* : A10A10A

Nennleistung maximal /
Rated maximum net power [kW/min⁻¹] : 152 / 13500

Arbeitsweise / *Working principle* : Fremdzündung / *Positive ignition*

Arbeitsweise / *Cycle* : Viertakt / *Four-stroke*

Anzahl der Zylinder / *Number of cylinders* : 4

Hubvolumen / *Engine capacity [cm³]* : 999

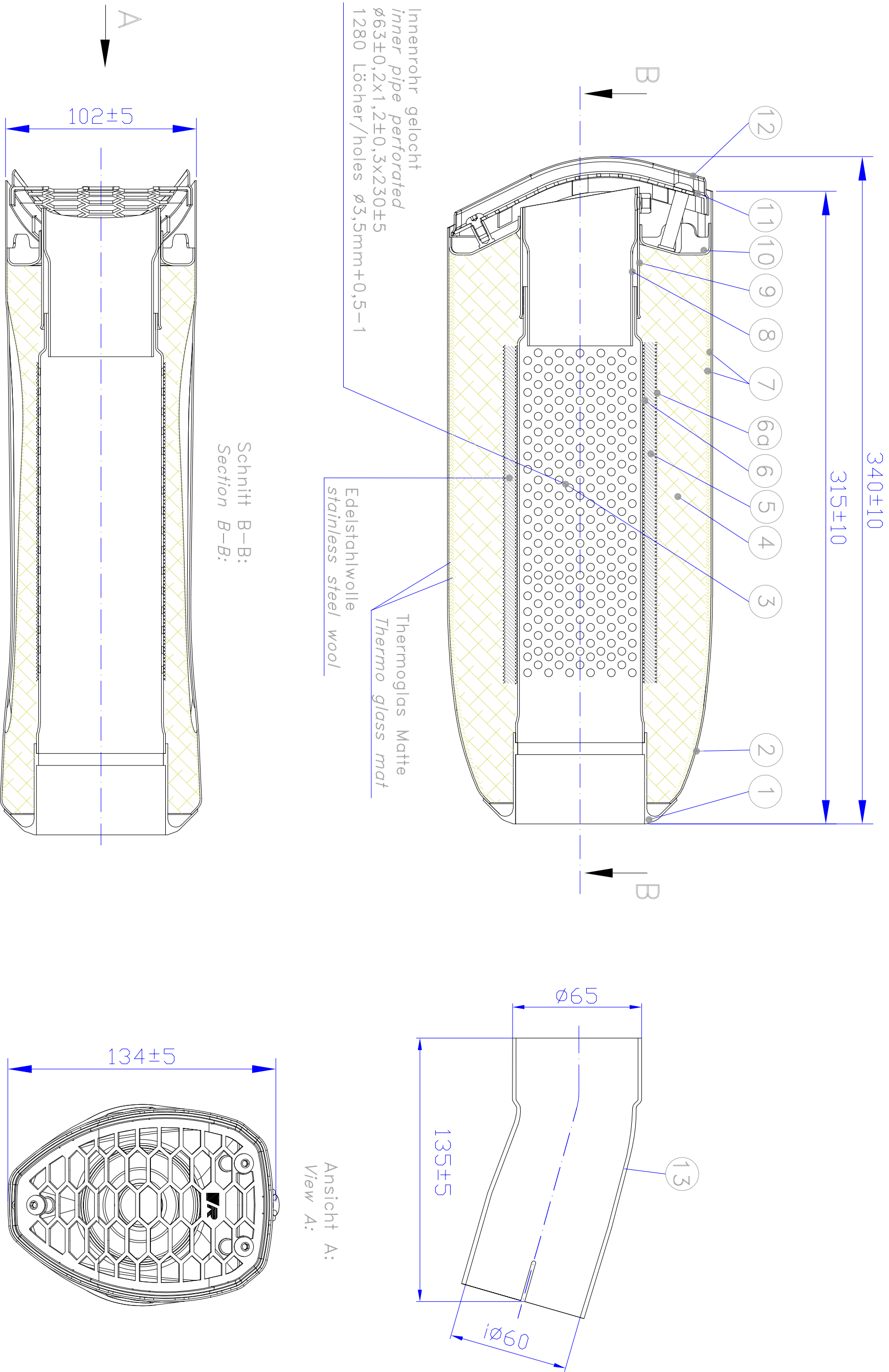
Kraftübertragung / *Transmission*

Typ / *Type* : manuell / *manual*

Anzahl der Gänge / *Number of gears* : 6

Übersetzungsverhältnisse der Gänge /
Gear ratios : 1. 4,373 / 2. 3,454 / 3. 2,853 / 4. 2,478 / 5. 2,247 /
6. 2,083

Achsübersetzung / *Final drive ratio* : 2,647

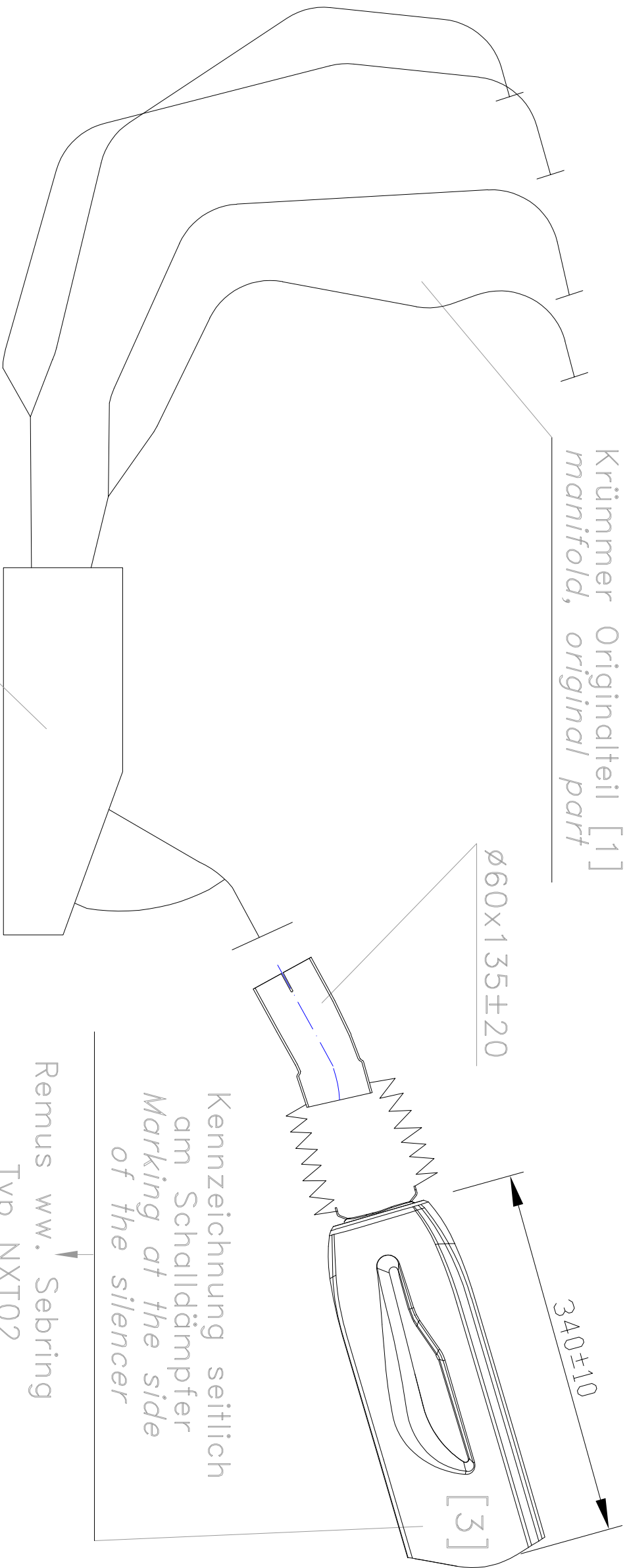


	Datum/da te	Name	Zeichnungnr/drawing-no.	R E M U S
Gez.:	25.11.19	TM	19ESD11251.1	Typ: NXT02
Gepr.:	25.11.19	VL		
Geän.:			Gepr.:	
Schalldämpfer/ silencer f. BMW S1000RR				

STÜCKLISTE / parts list

Pos. Nr.:	Benennung	Norm	Abmessungen	Werkstoff	Stk.	Einh.	Men.
Pos. Nr.:	description	norm	dimensions	material	piece	unity	
1	Einlasskappe <i>inlet cap</i>	DIN 2465	Ø98/Ø68±0,5x1,2±0,3x 46±5	Edelstahl 1.4301 <i>stainless steel tube ww.Titan/titanium</i>	1	mm	
2	Schalldämpfermantel <i>silencer shell</i>	DIN 1541	102±5x134±5x1,5±0,3x15±10	Edelstahl 1.4301 <i>stainless steel ww.Titan/titanium</i>	1	Stk	
3	Innenrohr gelocht <i>inner pipe perforated</i>	DIN 2465	Ø 63±0,2x1,2±0,3x230±10 1280Löcher/holes+20%-5% Ø3,5mm+0-1	Edelstahlrohr 1.4301 <i>stainless steel tube ww. Titan/titanium</i>	1	mm	
4	Dämpfungsmaterial <i>damping material</i>		210±15x1000±15	Acoustafil	1	mm	
5	Dämpfungsmaterial <i>damping material</i>			Edelstahlwolle <i>stainless steel wool</i>	80	g	+20%-10%
6	Drahtmaschengitter/ <i>wire mesh</i> Ø 0,16±0,04 ; w = 0,4±0,1		230±15x170±10	Edelstahl 1.4301 <i>stainless steel</i>	1	mm	
6a	Drahtmaschengitter/ <i>wire mesh</i> Ø 0,16±0,04 ; w = 0,4±0,1		260±15x180±10	Edelstahl 1.4301 <i>stainless steel</i>	1	mm	
7	Dämpfungsmaterial <i>damping material</i>		300±15x300±15	Thermoglasmatte <i>Thermo glass mat</i>	2	mm	
8	Innenrohr ungelocht <i>inner pipe unperforated</i>	DIN 2465	Ø58/Ø53x1±0,3x80±5	Edelstahlrohr 1.4301 <i>stainless steel tube ww. Titan/titanium</i>	1	mm	
9	Auslasshülse <i>outlet sleeve</i>	DIN 2465	Ø60x1±0,3x65±5	Edelstahl 1.4301 <i>stainless steel ww. Titan/titanium</i>	1	mm	
10	Endkappe <i>end cap</i>	DIN 1541	96±3x132±3x1,2±0,3x16±3	Edelstahl 1.4301 <i>stainless steel ww.Titan/titanium</i>	1	mm	
11	Auslassgitter <i>outlet grid</i>	DIN 1541	128±1x91,5±1	Edelstahl 1.4301 <i>stainless steel ww.Titan/titanium</i>	1	Stk	
12	Auslassring <i>outlet ring</i>	DIN 1541	132±5x94±5	Edelstahl 1.4301 <i>stainless steel ww.Titan/titanium</i>	1	Stk	
13	Verbindungsrohr <i>connecting pipe</i>	DIN 2465	Ø65/iØ60x1,2±0,3x135±5	Edelstahlrohr 1.4301 <i>stainless steel tube ww.Titan/titanium</i>	1	mm	

	Datum/date	Name	Zeichnungsnr/drawing-no	REMUS	
Gez.:	25.11.19	TM	19ESD11251.2	Typ NXT02	
Gep.:	25.11.19	VL			
Geä.:			Gep.:		
Schalldämpfer für Motorrad/silencer for motorcycle					



Serienvorschalldämpfer
mit Katalysator

[2] original front silencer
with catalyst

	Datum/ <i>date</i>	Name	Zeichnungnr/ <i>drawing-no.</i>	R E M U S
Gez.:	25.11.19	TM	19ESD11251.3	Typ: NXT02
Gepr.:	25.11.19	VL		
Geän.:			Gepr.:	
Schalldämpfer/ <i>silencer</i> f. BMW S1000RR				



Montageanleitung für REMUS Sportschalldämpfer Installation instructions for REMUS sport exhaust

BMW S 1000 RR 2019 →

Verpackungsinhalt / Packing content

1 REMUS Sportschalldämpfer, 1 Montagesatz
1 REMUS sport exhaust, 1 assembly kit

Demontage der Serienabgasanlage / Disassembly of the original exhaust system

Lösen Sie die Halterschraube sowie die Schelle des Serienschalldämpfers und nehmen Sie diesen ab.
Loosen the screw of the bracket and the clamp and remove the serial mufflers.



Montage des REMUS Sportschalldämpfers / Installation of the REMUS sport exhaust

Befestigen Sie das REMUS Verbindungsrohr am Serienkrümmer, verwenden Sie dazu die mitgelieferte Schelle. Montieren Sie den mitgelieferten Halter am REMUS Sportschalldämpfer. Schieben Sie den Sportschalldämpfer auf das Verbindungsrohr, verschrauben Sie den Halter und hängen Sie die Feder ein.

Install the REMUS connection tube, by using the supplied clamp, onto the serial header. Mount the supplied bracket on the REMUS sport exhaust. Slip the sport exhaust onto the connection tube, screw the bracket and hook the spring.



Irrtümer und Änderungen vorbehalten! / Errors and omissions excepted!

Seite / page: 1/2



Montageanleitung für REMUS Sportschalldämpfer Installation instructions for REMUS sport exhaust

BMW S 1000 RR 2019 →

! VORSICHT

Vor erstmaliger Inbetriebnahme muss die Schalldämpferanlage frei von Fettrückständen sein. Es ist ratsam nach der Montage die Bauteile mit einem nicht aggressiven Reinigungsmittels zu säubern.

Beim erstmaligen Betrieb des Enddämpfers ist die Motordrehzahl für ca. 5 Minuten niedrig zu halten, um den Enddämpfer gleichmäßig zu erwärmen. Nur so kann der Dämmstoff seinen vollen Wirkungsgrad erreichen und die geforderte Lautstärke einhalten!

! ATTENTION

Before first usage of the exhaust system, make sure that everything is greaseless. It is advisable to clean all components with a non-aggressive cleanser after installation. Keep low the engine speed for 5 minutes at the first usage to get a constant thermal expansion. This is the only way for the insulation to get the required system effectiveness and the required sound level!

Klemm- oder Schraubverbindungen locker vorziehen. Den REMUS Sportschalldämpfer ausrichten und die Verbindungen fest anziehen. Motor kurz anlassen und den kompletten REMUS Sportschalldämpfer auf Dichtheit überprüfen. Sämtliche Bauteile, sowohl im kalten als auch im betriebswarmen Zustand auf Funktion und genügend Freigängigkeit überprüfen. Achten Sie dabei auf einen ausreichend belüfteten Montageraum. Nach ca. 100 km alle Befestigungspunkte bzw. -elemente auf deren Funktionstüchtigkeit überprüfen und die Befestigungsschrauben nachziehen.

Um das gepflegte Aussehen verchromten sowie schwarz lackierten Bauteile auf Dauer zu gewährleisten, ist eine einfache Reinigung notwendig. Vor allem Salzablagerungen müssen umgehend mit Wasser entfernt werden.

Slightly tighten the clamp- and bolted connections. Align the REMUS sport exhaust and tighten the connections. Start the engine and test the whole system for leaks. Check all components for proper operation and sufficient clearance, both in cold and in operative condition. Pay attention that the workplace is adequately ventilated. After 60 miles check all fixation points according to tightness and function. If necessary, re-tighten the bolted connections!

To keep the shiny appearance of chromed and black painted parts, periodical cleaning must be carried out. Please ensure that road salt is removed as soon as possible by using water.