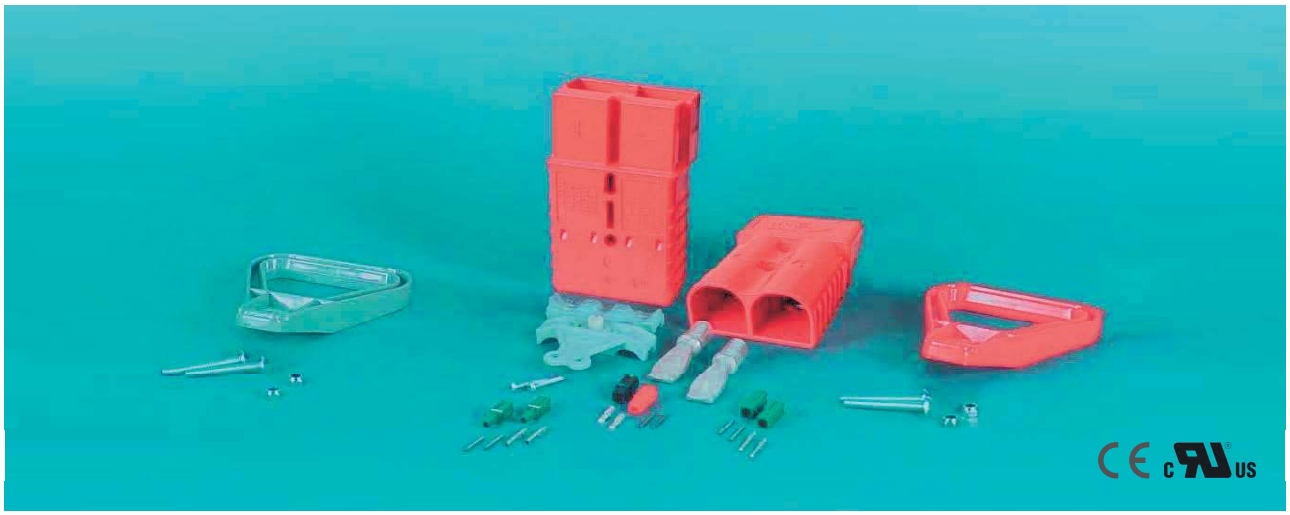
REMA FLAT BLADE CONTACT CONNECTORS SR50 · SR175 · SR350

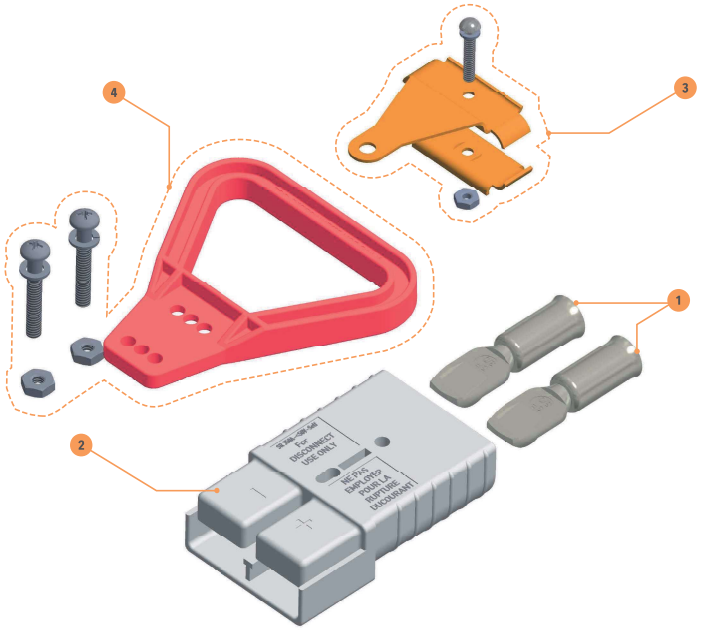


Productfeatures and advantages

- Reliable power connection solution for
  - > Electric vehicle batteries
  - > Battery chargers
  - > Forklift trucks
  - > Other DC voltage applications
- Operating voltage determined by housing color
  - > Simplifies mating of same voltages
- Plug and socket with identical housing design
  - > Reduces quantity of components
  - > Reduces purchasing and storage cost
- Acid resistant housing material
- Handels and strain relieves available
- CE Marking & UL recognized
- Contacts sized for AWG (American Wire Gauge)
- REMA developed high-grade contacts made out of pure high conductive Cu-ETP copper with silver plated surface and an anti-friction and tarnish coating ensure
  - > power transition with minimal losses
  - > long life
  - > suitable for crimping

PE-TD-006 V02 | 03.2018 |

1. STRUCTURE / PART-NUMBERS



FLAT CONNECTORS SR50 · SR175 · SR350

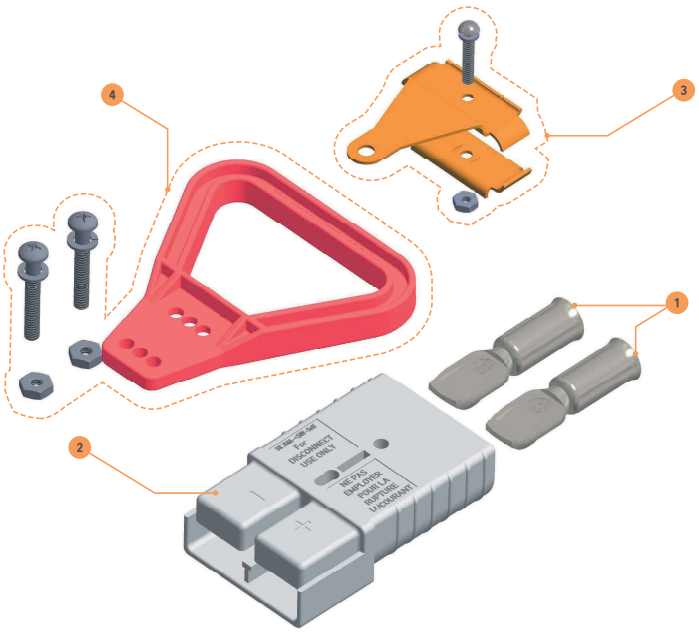
DESCRIPTION	CODING	SET PARTS	CROSS SECTION:	AWG10/12	AWG8	AWG6
SR50 complete red	24 V	1, 2	PART-NO.	109310	109311	109324
SR50 complete grey	36 V	1, 2	PART-NO.	109317	109318	109316
SR50 complete black	80 V	1, 2	PART-NO.	109320	109321	109319

DESCRIPTION	CODING	SET PARTS	CROSS SECTION:	AWG 4	AWG 2	AWG 1/0
SR175 complete red	12 V	1, 2	PART-NO.	109338	109339	109340
SR175 complete grey	36 V	1, 2	PART-NO.	109328	109329	109327
SR175 complete blue	48 V	1, 2	PART-NO.	109332	109333	109331

DESCRIPTION	CODING	SET PARTS	CROSS SECTION:	AWG 1/0	AWG 2/0	AWG 3/0	AWG 4/0
SR350 complete red	12 V	1, 2	PART-NO.	109428	109429	109430	111475
SR350 complete grey	36 V	1, 2	PART-NO.	109421	109422	109424	109427
SR350 complete blue	48 V	1, 2	PART-NO.	109425	109426	110390	111476

ADDITION PARTS FLAT CONNECTORS SR50 · SR175 · SR350

DESCRIPTION	SET PARTS	PART-NO.
cable clamp set SR50	3	104756
cable clamp set SR175	3	102719
cable clamp set SR350	3	102723
handle SR50 red with 2 screws	4	109407
handle SR175 red with 2 screws	4	109400
handle SR175 grey with 2 screws	4	109392
handle SR350 red with 2 screws	4	109416
handle SR50 grey with 2 screws	4	109410



2. TECHNICAL SPECIFICATIONS

GENERAL

CONNECTOR MODEL	SR50	SR175	SR350
Wire size	8 AWG	1/0 AWG	4/0 AWG
Current rating I_N (1)	50 A	175 A	350 A
Voltage rating	600 V	600 V	600 V
Operating Temperature (incl. self-heating)	-20 °C … +105 °C -4 °F … +221 °F		

(1) depending on cross section and installation

HOUSING MATERIAL DATA

	Standard	>PBT/PC-Blend<
Halogen-free	DIN VDE 0472-815	yes
Reaction to fire	UL 94	V-0
Ozone resistant		yes
Creepage current resistance	IEC 60112	225 V

MATERIAL DATA CONTACTS

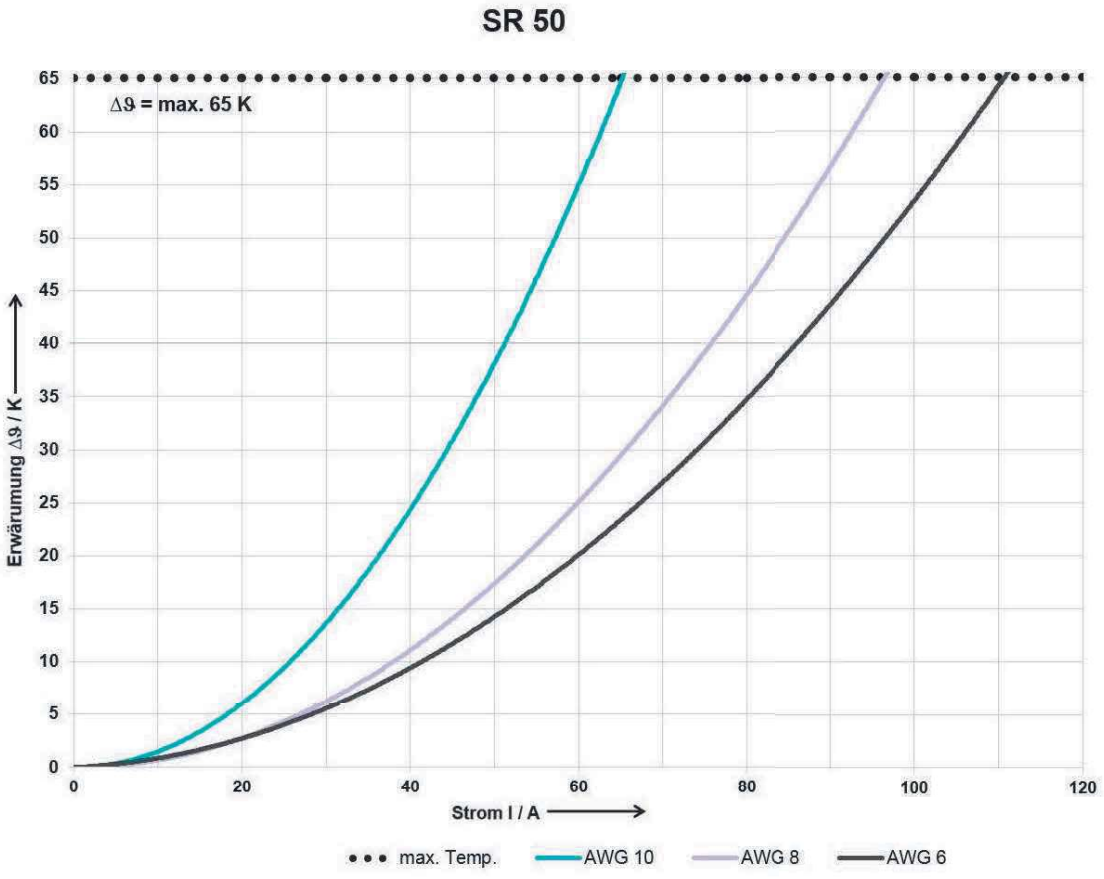
- Electrolytic high conductive copper Cu-ETP acc. EN 13601 and silver plated surface.

3. TEMPERATURE RISE CHARTS

SR50

REMA® SR50 SR50 connector system is designed for optimum performance when used with 8 AWG cross section cable. The rated operating current is 50 A.

Depending on the cross section and the laying procedure, the current rating is changed.



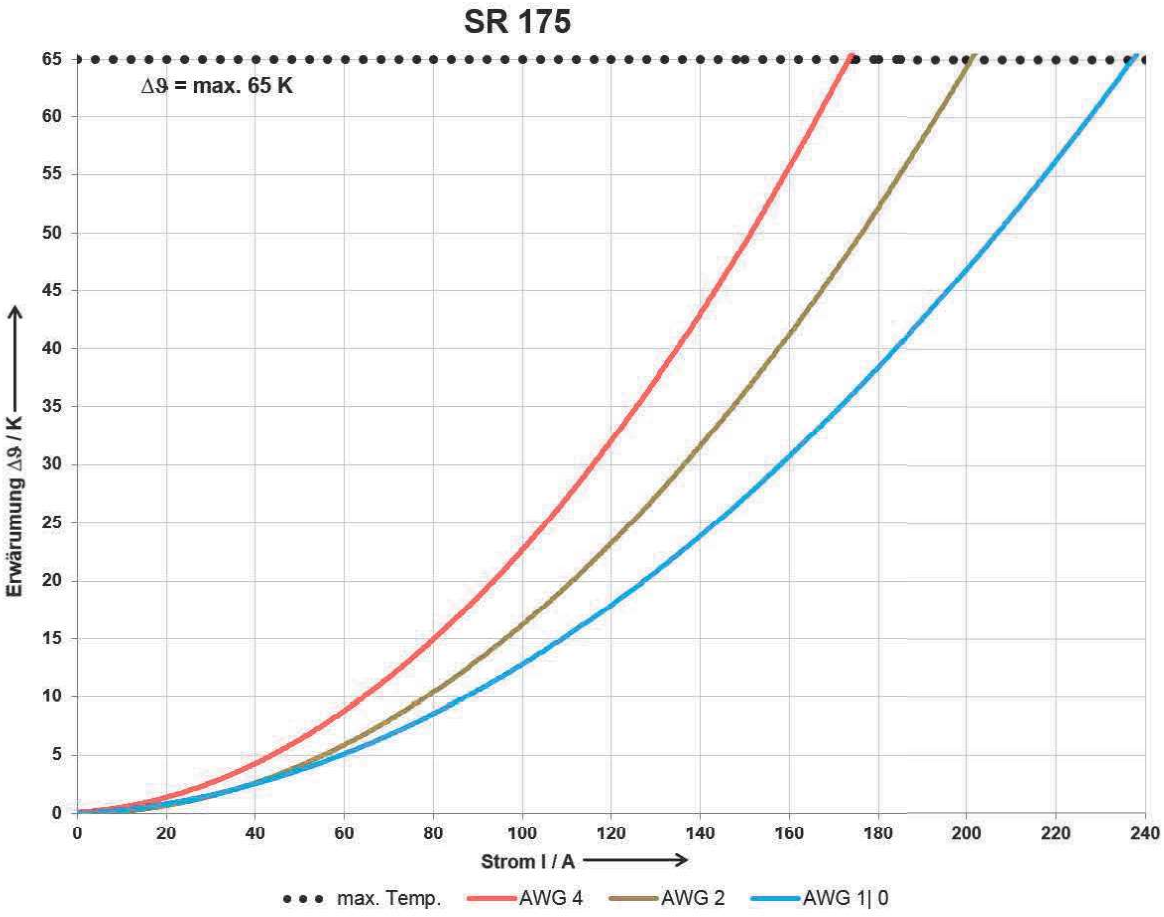
These following temperature rise curves are for reference.
The actual thermal performance may vary depending upon environmental conditions.

Please contact REMA for additional information concerning the SR50.

SR175

REMA® SR175 connector system is designed for optimum performance when used with 1/0 AWG cross section cable. The rated operating current is 175 A.

Depending on the cross section and the laying procedure, the current rating is changed.



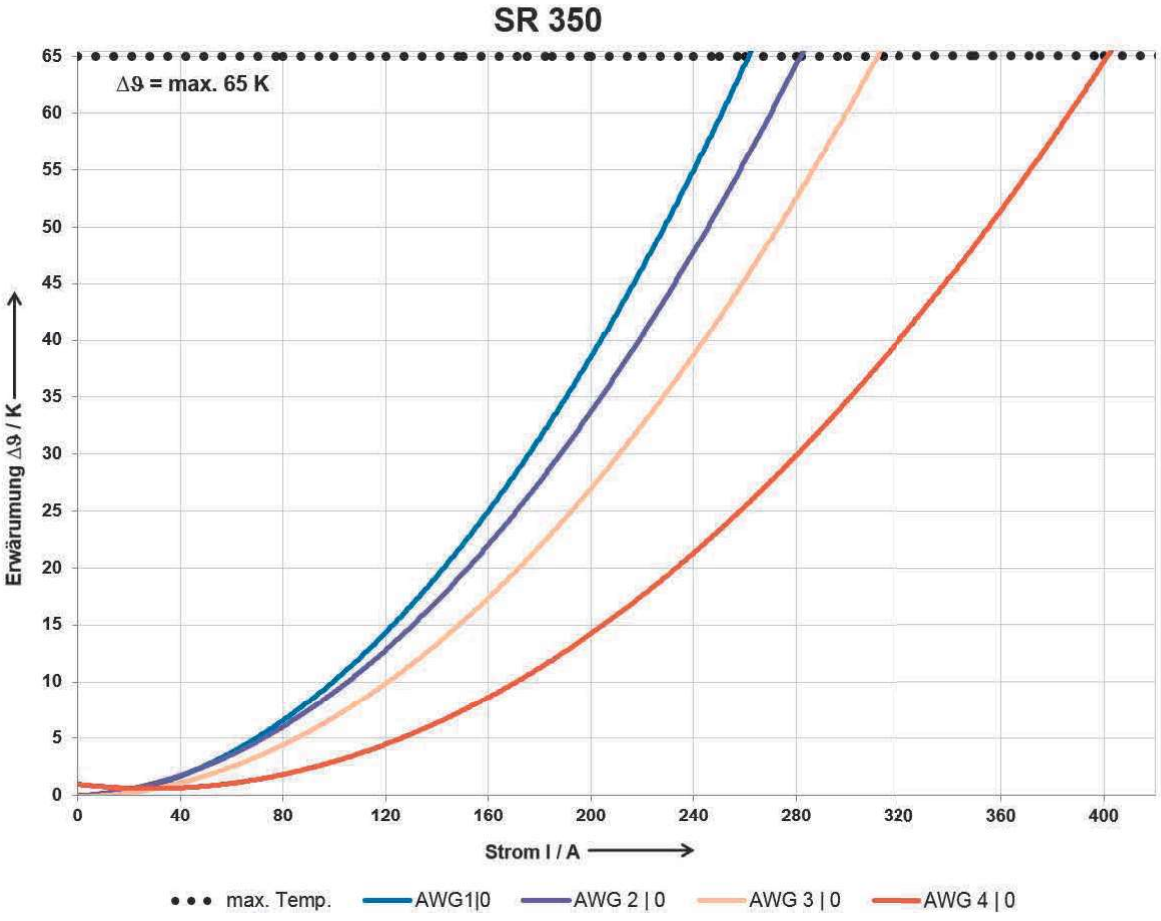
These temperature rise curves are for reference.
The actual thermal performance may vary depending upon environmental conditions.

Please contact REMA for additional information concerning the SR175.

SR350

REMA® SR350 connector system is designed for optimum performance when used with 4/0 AWG cross section cable. The rated operating current is 350 A.

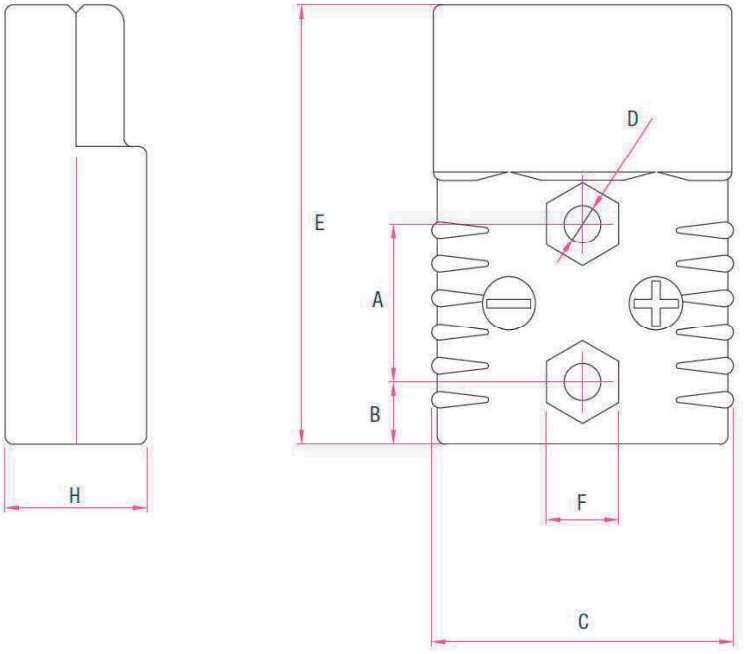
Depending on the cross section and the laying procedure, the current rating is changed.



These temperature rise curves are for reference.
The actual thermal performance may vary depending upon environmental conditions.

Please contact REMA for additional information concerning the SR350.

4. DRAWINGS



TYPE	A		B		C		D		E		F		H	
	[mm]	[inch]	[mm]	[inch]	[mm]	[inch]	[mm]	[inch]	[mm]	[inch]	[mm]	[inch]	[mm]	[inch]
> SR50	19	0,75	6,2	0,25	35,7	1,38	4	0,16	48	1,89	---	---	15,8	0,62
> SR175	28,6	1,13	11,2	0,44	54,9	2,16	6,6	0,26	79,5	3,13	13,0	0,51	25,4	1,00
> SR350	28,5	1,12	34,7	1,37	70,0	2,75	7,0	0,28	107,5	4,23	13,0	0,51	33,2	1,30

5. GENERAL PROCESSING INFORMATION SR50 · SR175 · SR350

Installation of contacts and connector by a qualified electrician in accordance with national and local electrical codes and the following instruction only. Crimp contact to the cables according to the ´s assembly instructions.
The following instructions serve as a reference.

1.Strip wire

- Select the correct strip length from table 1.
- Do not cut into cable strands!

2. Crimpverbindung an den Kabel

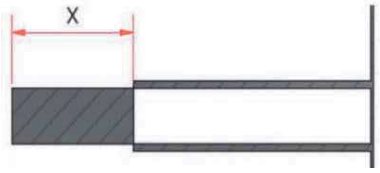
- Select contact from table 1.
- Use only suitable die sets!

3. Insert the wired contact into the rear of the hosing according to picture 2

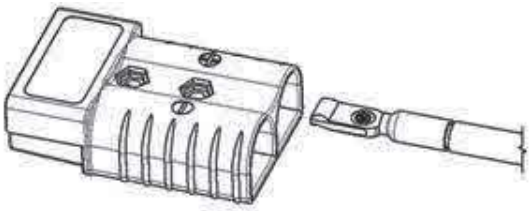
- Make sure that the smooth contour of the contact is upwards so that the contact underside moves over the housing spring (picture 2) and is retained with an audible click.
- To check engagement, pull gently on the cable to make sure contact. is correctly locked over the housing spring.

Table 1: Overview Table

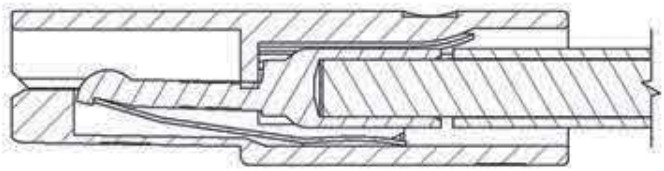
TYPE	Contact Part-No.	Wire Size AWG or mm²	„X" in mm acc. pic. 1	X" in inches acc. pic. 1
> SR50	109356	10/12 AWG	13,5	0,53
> SR50	109358	8 AWG	12,5	0,49
> SR50	109354	6 AWG	12	0,47
> SR175	109360	4 AWG	26	1,02
> SR175	109364	2 AWG	26,5	1,02
> SR175	109363	1/0 AWG	26	1,04
> SR350	109368	1/0 AWG	30,5	1,2
> SR350	109371	2/0 AWG	30,5	1,2
> SR350	102752	3/0 AWG	33	1,29
> SR350	102753	4/0 AWG	33	1,29



Picture1: Strip length



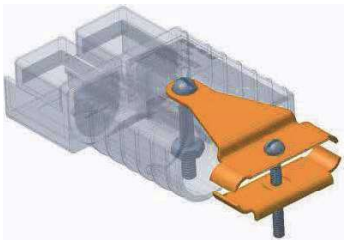
Picture 2: Assembly of wired contact into housing



Picture 3: Installed contact into housing

Disassembly

- Switch off power the contact according to DIN EN 60079-14 when dis-assembling the contact.
- Remove contact by pressing the spring at the front of the connector with a small insulated screwdriver. Simultaneous while pressing the spring, pull gently on the cable to remove the contact from the housing.



SAFETY NOTE

Lay the cables free of tension!
In torsional and / or tensile forces in the cable using the cable clamp REMA SR is recommended
SR50 Part-No.: 104756
SR175 Part-No.: 102719
SR350 Part-No.: 102723