

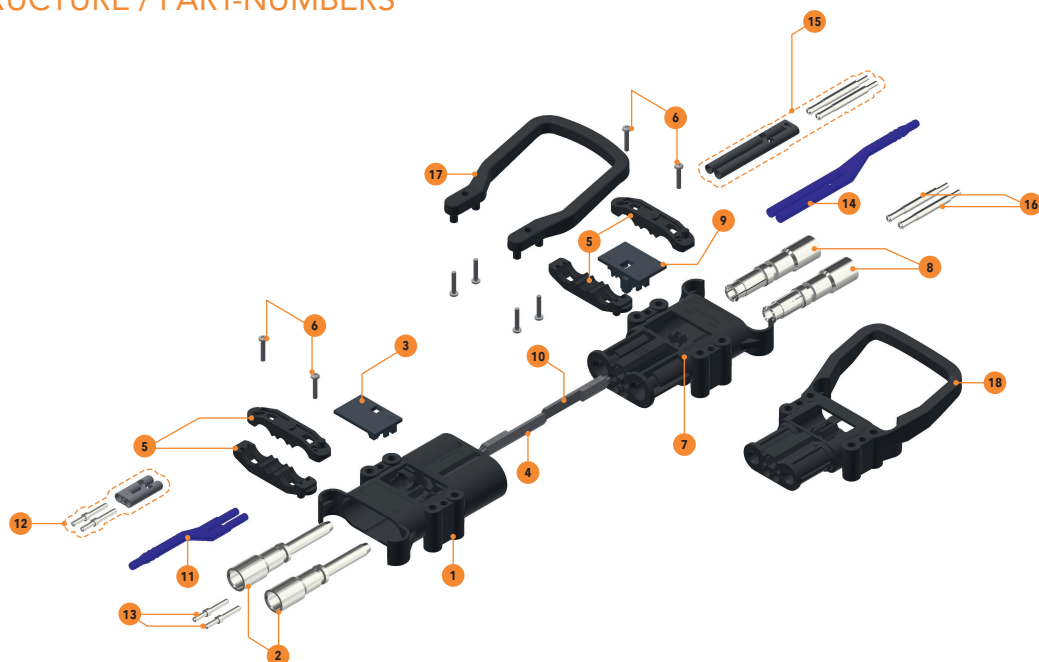
## REMA BATTERY CONNECTOR DIN320



### Product features and advantages

- > Specifically designed for the quick and opportunity charging of large battery capacities
- > Suitable for lead gel accumulators and lithium-ion batteries
- > Corresponds to the DIN VDE 0632-589 and EN 1175-1
- > Spring supported contact system for
  - > optimal contact pressure
  - > high electrical conductivity
- > 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
- > Durable because of acid resistant design
- > Suitable for cable sizes up to 95 mm<sup>2</sup>
- > Direct crimping without reducing bushing for all cable size
- > Wide range of accessories
  - > different handle shapes
  - > 1 pair of additional auxiliary and 1 pair of pilot contacts
  - > cooling system with air supply through
- > Typical applications
  - > forklift trucks
  - > battery charging systems
  - > sweeper and RCC devices

## 1. STRUCTURE / PART-NUMBERS



### PLUG AND SOCKET SETS DIN320

DESCRIPTION	SET PARTS	CROSS SECTION:	50mm <sup>2</sup>	70mm <sup>2</sup>	95mm <sup>2</sup>
DIN320 plug; grey coding; acid resistant	1/2/3/4/(5(2x))/6	<b>PART-NO.</b>	108952	108957	108960
DIN320 socket; grey coding; acid resistant	5(2x)/6/7/8/9/10	<b>PART-NO.</b>	108972	108975	108979

### ADDITION PARTS DIN320

DESCRIPTION	POSITION	PART-NO.
DIN320 air adapter plug (6 / 8 mm connection)	11	100467
DIN320 pilot contact set plug	12	108751
DIN320 aux contact for plug	13	102691
DIN320 air adapter socket (6 / 8 mm connection)	14	100466
DIN320 pilot contact set socket	15	108749
DIN320 aux contact for socket	16	108747
DIN320 coding pin green	4	100049
DIN320 coding pin yellow	4	100048
DIN320 coding pin plug blue	4	100020
DIN320 coding pin green	10	100049
DIN320 coding pin socket blue	10	100021
DIN320 handle grey; bended; with 4 screws; acid resistant	17	108880
DIN320 handle grey; bended; with 8 screws; acid resistant	17	108881
DIN320 handle; flat; with 2 screws; acid resistant	17	108908

## 2. TECHNICAL SPECIFICATIONS

### GENERAL

> Nominal voltage $U_N$	150 V DC
> Current rating $I_N^{(1)}$	320 A acc. DIN VDE 0623-589
> Test voltage	2 kV AC acc. EN 1175-1
> Temperature range (incl. self-heating)	-20 °C ... +105 °C -4 °F ... +221 °F
> Whole plugging line	app. 46 mm
> Plugging line main contact	app. 20 mm
> Plugging line auxiliary contact	app. 10 mm

(1) for cable cross-sections 95 mm<sup>2</sup>

### STANDARDS

- > DIN VDE 0623-589
- > DIN EN 1175-1 (VDE 0117-1)
- >  File E226710

### MATERIAL HOUSING

	Standard	>PP-GF30<	>PA-GF30<
> Color		grey sim. RAL7016	black sim. RAL9005
> Halogen-free	DIN VDE 0472-815	yes	yes
> UV resistant		yes	yes
> Ozone resistant		limited	no
> Battery acid resistant	EN 1175-1	yes	no
> Comparative Tracking Index	IEC 60112	600 V	550 V

### MATERIAL CONTACTS

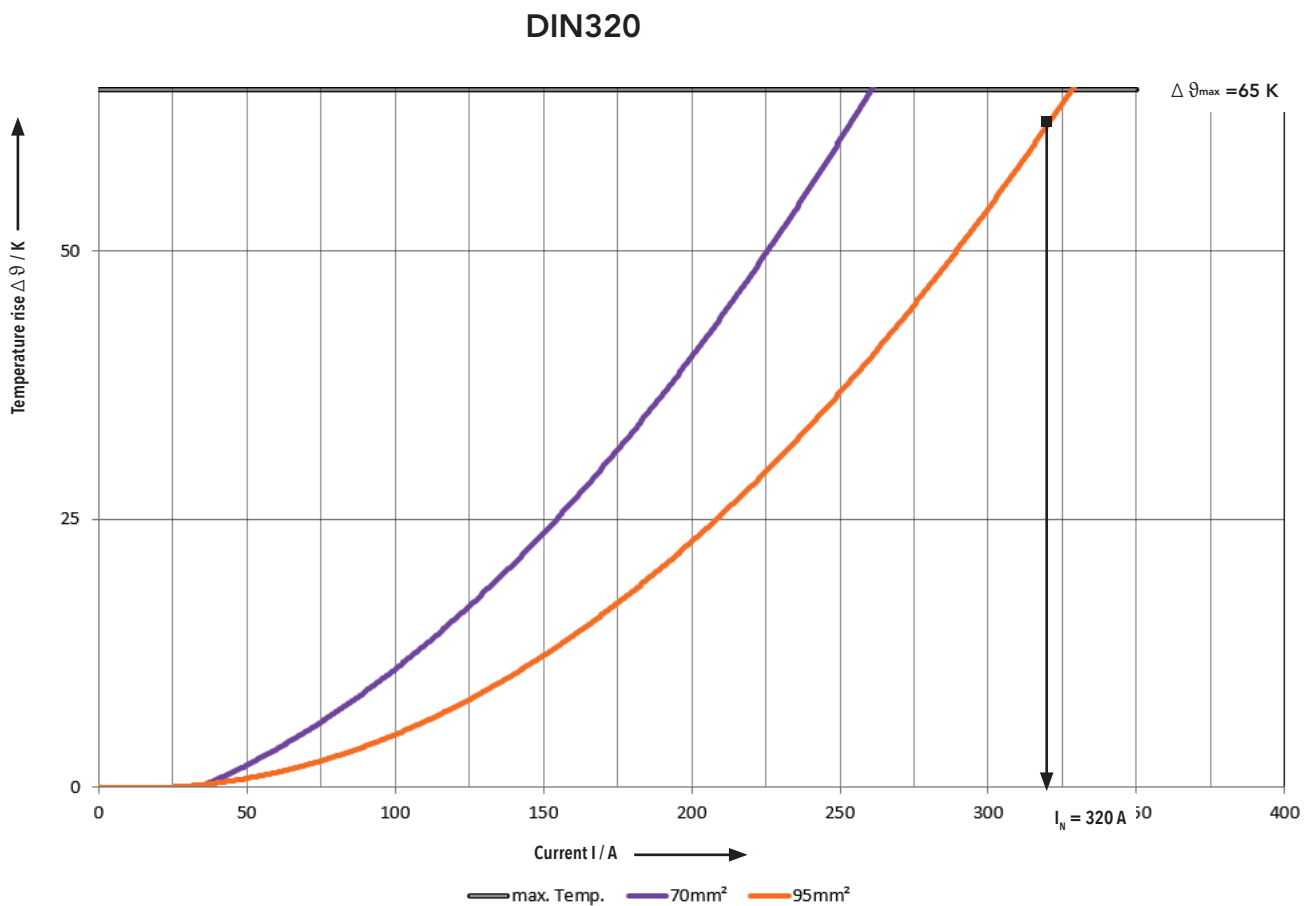
- > Electrolytic high conductive copper Cu-ETP acc. EN 13601 and silver plated surface

### 3. HEATING OF MAIN CONTACTS

The REMA DIN320 connector system is designed for optimum performance when used 95 mm<sup>2</sup> cross section cable according DIN VDE 0623-589.

**At other cable cross section the nominal operation current  $I_N$  will be different.**

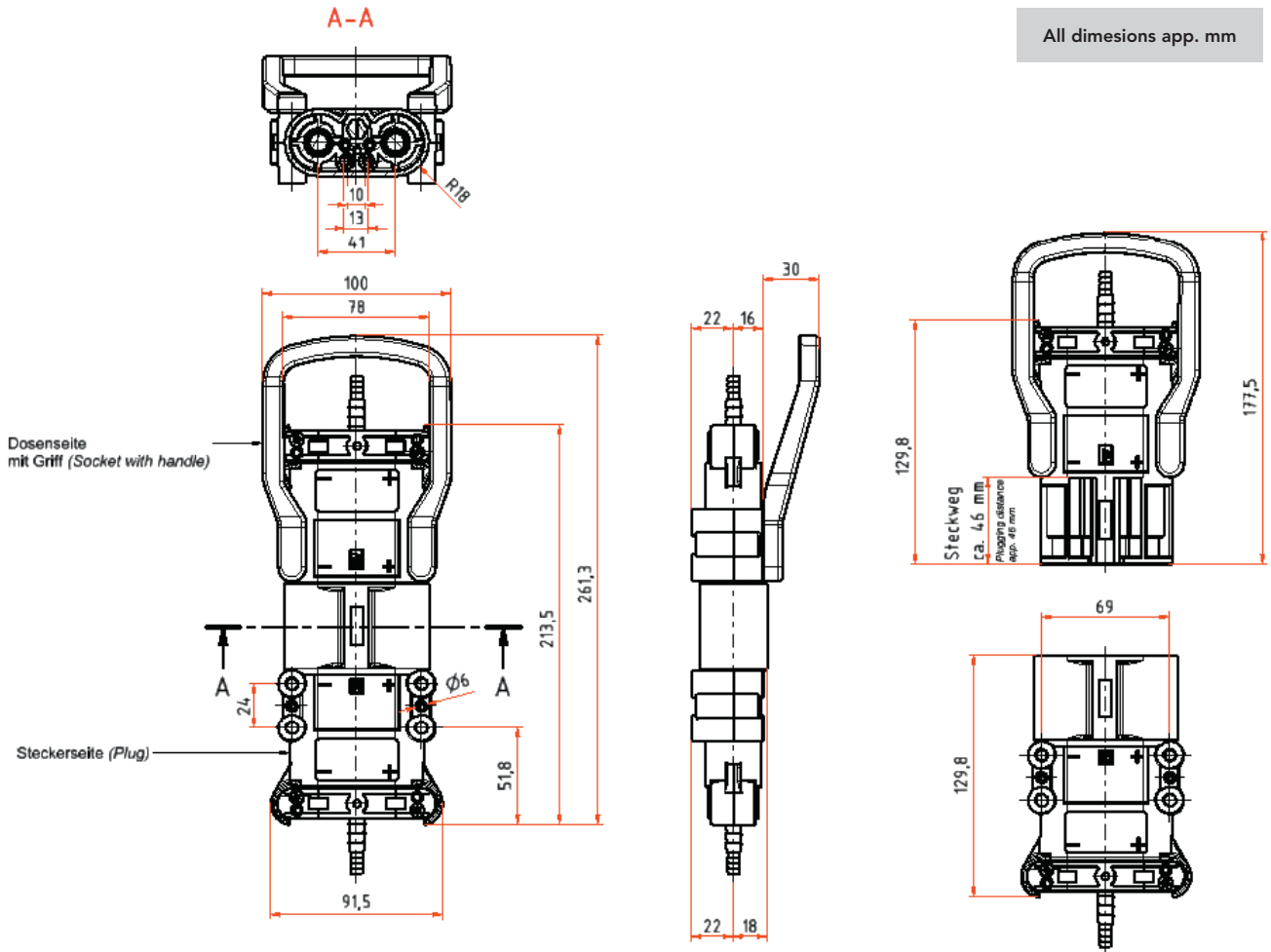
The following curves are for reference. The actual thermal performance may vary depending upon environmental conditions.



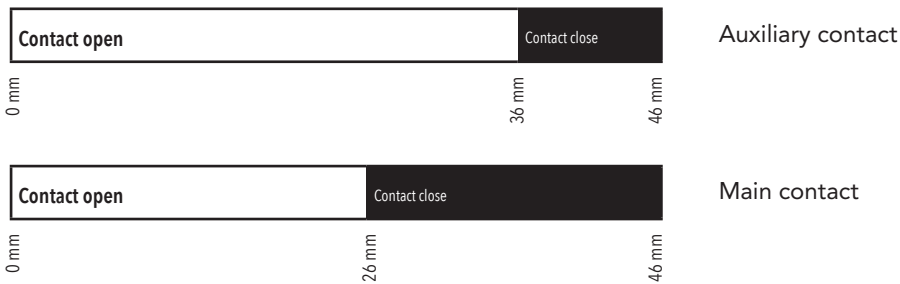
Extra fine-wired highly flexible quality - EN 60228/class 6

Please contact REMA for additional information concerning DIN320 battery connector system.

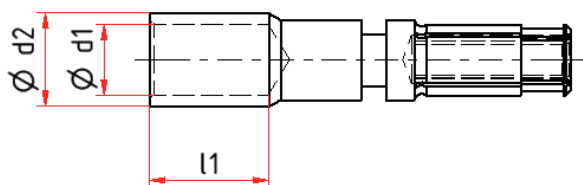
4. DRAWINGS



Plugging distance charts REMA Battery Connector DIN320



Preparation wire acc. DIN VDE 0623-589



CROSS SECTION [mm <sup>2</sup> ]	$\varnothing d2$ [mm] -0,20	$\varnothing d1$ [mm] $\pm 0,1$	$l1$ [mm] +0,50
50	14,5	11,0	20,0
70	16,0	13,0	20,0
95	19,8	15,0	25,0

## 5. CODING

The different types of batteries which are used on the vehicle market today (wet, dry or gel batteries), may only be charged with the right charger for this type of battery.

In extreme cases, unapproved combinations of charge system and batteries can lead to the battery destruction.

In addition, only chargers and batteries with the same voltage may be combined.

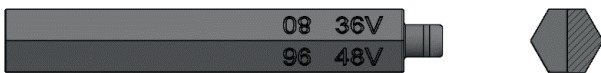
For this reason REMA has developed a specially designed coding system with colored and labelled coding pins. This system allows correct connections and prevent incorrect ones.

The REMA Coding System meets the requirements of DIN VDE 0623-589.

All displayed product versions can only be used for the REMA DIN160, DIN320, DIN640.

### Coding pin for wet batteries

- > **Current rating I:** acc. DIN VDE 0623-589
- > **Color:** Grey RAL7035
- > **Voltage range:** 24 V ... 96 V



Part-No.100015

### Coding pin for dry batteries

- > **Current rating I:** acc. DIN VDE 0623-589
- > **Color:** Green RAL6005
- > **Voltage range:** 24 V ... 96 V



Part-No. 100049

### Universal coding pin (only for plugs) for wet/dry batteries

- > **Current rating I:** acc. DIN VDE 0623-589
- > **Color:** Yellow RAL1018
- > **Voltage range:** 24 V ... 96 V



Part-No.100048

### Lithium Ionen coding pin (Plug and Socket)

- > **Current rating I:** acc. DIN VDE 0623-589
- > **Color:** Blue RAL5017
- > **Voltage range:** 24 V ... 96 V



Plug: Part-No.100020

Socket: Part-No.100021

## 6. DIE SETS

### General processing information

- Please only use suitable REMA die sets. Only those guarantee a secure electrical connection.
- Please actuate die sets always until the end.
- Only process contacts with clean sleeves. The contaminated crimpsleeves increase the contact resistance and may lead to overheating.
- Please always set the die sets centred on the crimp sleeves.

### Hydraulic tool pliers set HP60 Type H60 - Die Sets

- Indent crimping press area 6 – 70 mm<sup>2</sup>
- Double indent crimping press area 16 – 70 mm<sup>2</sup>

Set Part-No. 107138

Set Part-No. 113032



### Typ C130 - die sets

- Indent crimping press area 10 – 95 mm<sup>2</sup>
- Souple indent crimping press area 10 – 240 mm<sup>2</sup>



For further questions, please contact your REMA Sales department.



### Selection of deliverable range of die sets type C130

CROSS SECTION	TYPE OF DIE SET	PART-NO.
10 mm <sup>2</sup>	indent	104219
16 mm <sup>2</sup>	indent	111092
25 mm <sup>2</sup>	indent	111093
35 mm <sup>2</sup>	indent	111094
50mm <sup>2</sup>	indent	111095
70 mm <sup>2</sup>	indent	111096
95 mm <sup>2</sup>	indent	111097

CROSS SECTION	TYPE OF DIE SET	PART-NO.
10 mm <sup>2</sup>	double indent	107181
16 mm <sup>2</sup>	double indent	107182
25 mm <sup>2</sup>	double indent	107187
35 mm <sup>2</sup>	double indent	107191
50 mm <sup>2</sup>	double indent	107196
70 mm <sup>2</sup>	double indent	107201
95 mm <sup>2</sup>	double indent	107204
120 mm <sup>2</sup>	double indent	107208
240 mm <sup>2</sup>	double indent	107212

### Selection of deliverable range of die sets type H60

CROSS SECTION	TYPE OF DIE SET	PART-NO.
6 mm <sup>2</sup>	indent	110676
10 mm <sup>2</sup>	indent	107264
16 mm <sup>2</sup>	indent	107265
25 mm <sup>2</sup>	indent	107266
35 mm <sup>2</sup>	indent	107267
50 mm <sup>2</sup>	indent	107268
70 mm <sup>2</sup>	indent	112717

CROSS SECTION	TYPE OF DIE SET	PART-NO.
16 mm <sup>2</sup>	double indent	107270
25 mm <sup>2</sup>	double indent	107271
35 mm <sup>2</sup>	double indent	107272
50 mm <sup>2</sup>	double indent	107273
70 mm <sup>2</sup>	double indent	112714

## 7. POWER CABLE

The cables of the REMA DIN High-Power DC Connector System are extra fine-wired flexible copper cables according to EN 60228 / class 6.

CROSS SECTION	CABEL PART-NO.	
10 mm <sup>2</sup>	REMA Flex® 104750	H01N2-D 103115
16 mm <sup>2</sup>	REMA Flex® 103117	H01N2-D 103117
25 mm <sup>2</sup>	REMA Flex® 103122	H01N2-D 103121
35 mm <sup>2</sup>	REMA Flex® 103125	H01N2-D 103124
50 mm <sup>2</sup>	REMA Flex® 103130	H01N2-D 103528
70 mm <sup>2</sup>	REMA Flex® 103132	H01N2-D 110428
95 mm <sup>2</sup>	REMA Flex® 103135	H01N2-D 103133
120 mm <sup>2</sup>	Frötec Kabel 104353	Lapp Kabel 104705
240 mm <sup>2</sup>		H01N2-D 104354
AWG 4/0	cobra wire AWG 4/0	cobra wire AWG 4/0

On request, we are happy to evaluate your special cables and submit an offer for crimp validation.