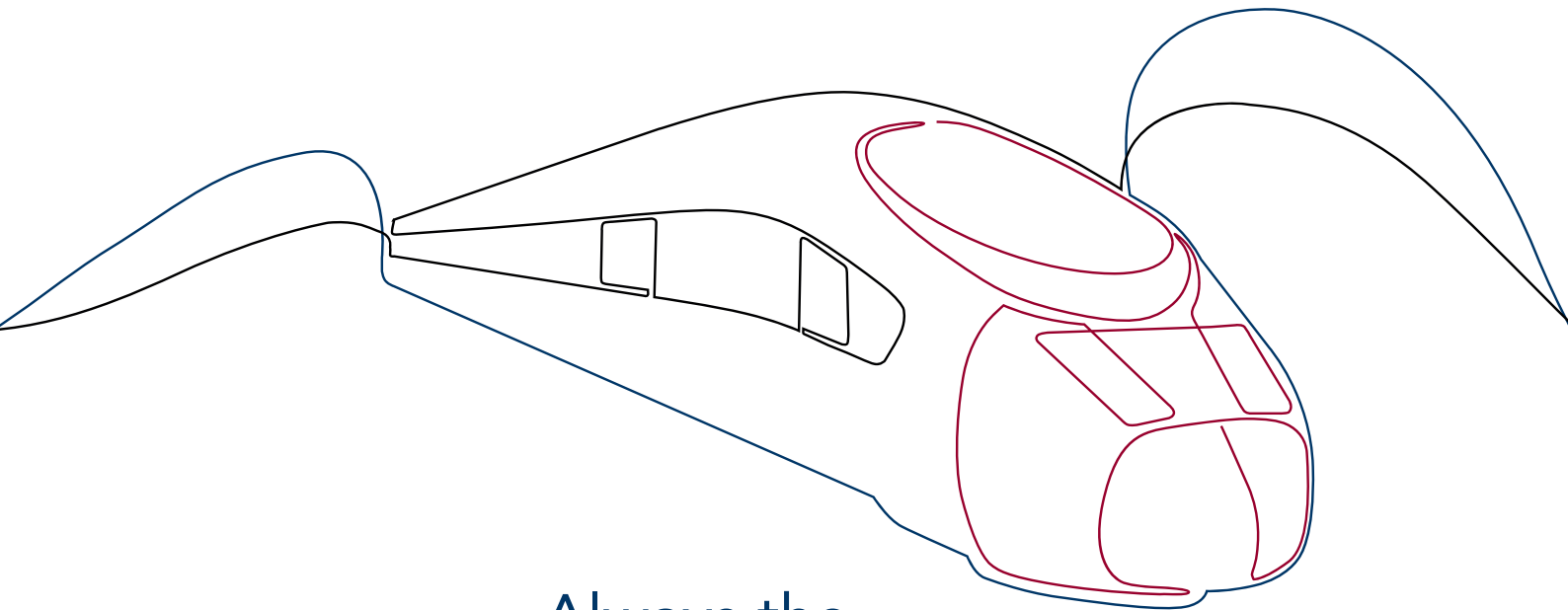


## UIC 552 M1 SERIES



Always the  
right connection



---

**Quality Standard:** All products are subject to an extensive quality test in the final inspection phase. Of course, we are certified according to current industry-specific standards.

## UIC 552 M1 SERIES CONNECTORS



### PRODUCT INFO

UIC 552 connectors are required for all rail vehicles used in international traffic with a power train line.

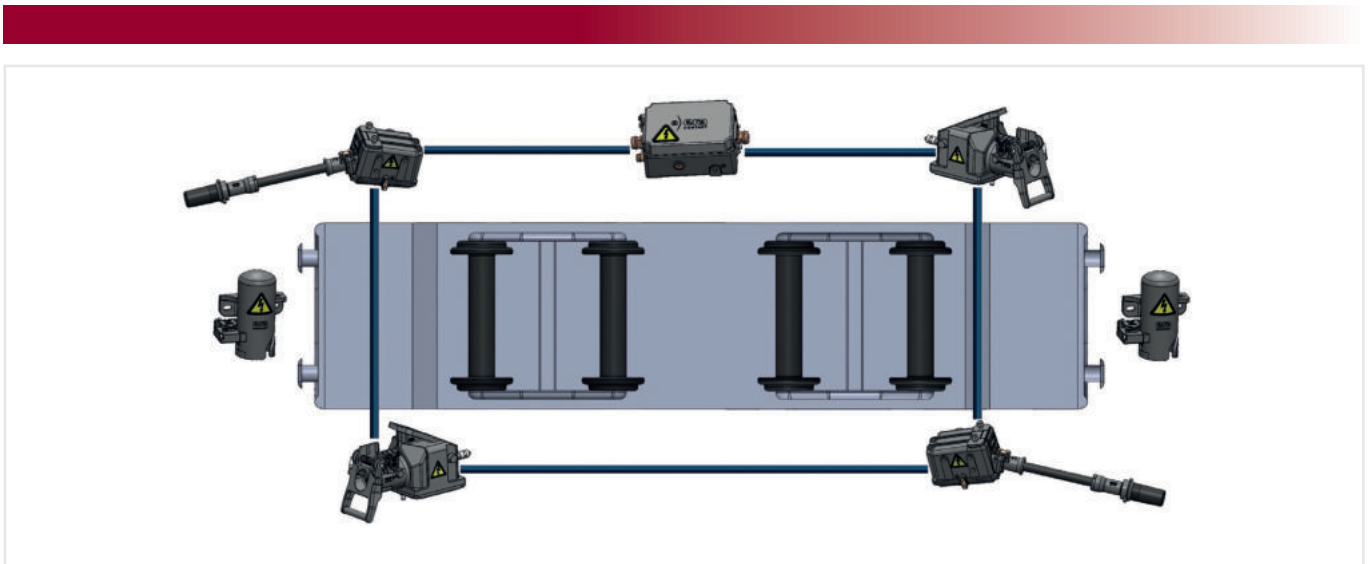
The power train line ensures the power supply between all rail vehicles, including traction units. The UIC 552 standard defines a uniform standard, which ensures that wagons from different manufacturers are internationally compatible with each other.

For technical implementation, appropriate connectors are required between the traction unit and all other rail vehicles. Our robust era-contact UIC 552 connector system meets all specifications of the UIC 552 standard.

### APPLICATION AREA

- For electrical connection according to UIC 552 for local and long-distance trains
- As new equipment for the power train line
- During the overhaul of rail vehicles
- For use with spare parts
- Compatible with all UIC 552 systems on the market

## UIC 552 M1 SERIES FEATURES



- All products of the series are UIC 552 compliant
- Robust, durable construction according to the current state of the art
- Grounding according to currently valid EN standards
- Increased corrosion resistance against chemical influences
- Current transmission of 800 A at -10°C with a nominal voltage of 3 kV AC/DC and rated voltage of 3.9 kV
- Threaded holes for the cable outlets up to M50 selectable as standard
- Protection against dust and moisture according to the protection class: min. IP55
- Protection against unintentional disconnection
- Weather and temperature resistance: min. -50°C to max. +85°C for all connector materials

### UIC 552 M1 series plug (S)

- Also available as connector cable (AS) or jumper cable (VS)
- Crimp connection 185 mm<sup>2</sup>
- Protection against unintentional contact is guaranteed
- Grounding implemented via 25 mm<sup>2</sup> shielding braid

### UIC 552 M1 series receptacle (KDO)

- More safety and less wear thanks to optional pilot contact for plug monitoring
- Locking device to prevent unauthorized access, available on right or left side
- Symmetrical, one-piece design for easy maintenance and ideal integrability of the receptacle
- Individually selectable cable outlets
- M10 grounding interface

### UIC 552 M1 series dummy receptacle (BDO)

- Variant available with and without locking device
- Available with and without IP 55 protection class

### UIC 552 M1 series cable junction box (KAK)

- M8 grounding interface on the rear right (other sizes on request)

### UIC 552 M1 series junction box (AZK)

- Variant available with and without flange
- Variant with flange enables mounting of preassembled cable in AZK
- Simplification of assembly and connection processes
- M12 grounding interface

## UIC 552 M1 SERIES TECHNICAL DATA

SPECIFICATION	DESCRIPTION	VALUES & DATA
Standards	Type Protection class (EN 60529)	UIC 552 VE Receptacle (KDO): IP56 – coupled or receptacle closed, on request higher IP protection possible dummy receptacle (BDO): standard IP 20 (plugged), IP 55 possible on request Junction box (AZK) and Cable junction box (KAK): IP55
Connection type	Number of poles Connection cross section Connection to female contact Connection to male contact	1 185 mm <sup>2</sup> M16 screw connection Crimp
Electrical characteristics	Nominal voltage Rated voltage Rated current	3 kV AC / DC 3.9 kV 800 A at -10 °C
Mechanical characteristics	Insertion force Pull-out force	> 200 N > 100 N
Operating conditions	Operating temperature range	-50°C ... +85°C
Materials	Plug housing Receptacle housing Plug head Contact insert Seals  Contacts	Cast aluminum Cast aluminum Thermoset Thermoset Chloroprene rubber, EPDM, Silicone elastomer Copper alloy
Weights	Plug (without cable) Receptacle without lock and pilot contact Lock for receptacle/ dummy receptacle Pilot contact Cable junction box Junction box Dummy receptacle	approx. 1.8 kg  approx. 16.0 kg  approx. 0.4 kg approx. 0.4 kg approx. 7.5 kg approx. 12.5 kg approx. 2.1 kg

Special requirements possible upon request

# UIC 552 M1 SERIES PLUG (S), CONNECTOR CABLE (AS) & JUMPER CABLE (VS)



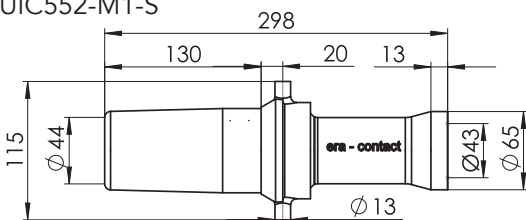
### Product info

Our plugs are equipped with high quality components for power transmission up to 800 A. This product for the train line thus permanently meets high functionality and safety requirements.

UIC 552 M1 plug: Deep black, RAL 9005

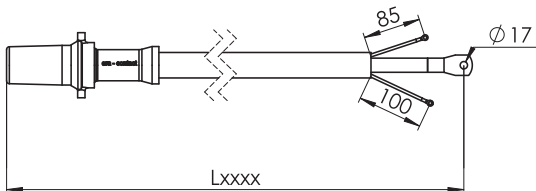
### Plug without cable:

UIC552-M1-S



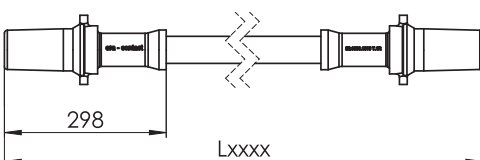
### Connector cable with plug:

UIC552-M1-AS-Lxxxx



### Jumper cable with two plugs:

UIC552-M1-VS-Lxxxx



### CABLE LENGTH L

### TOLERANCE

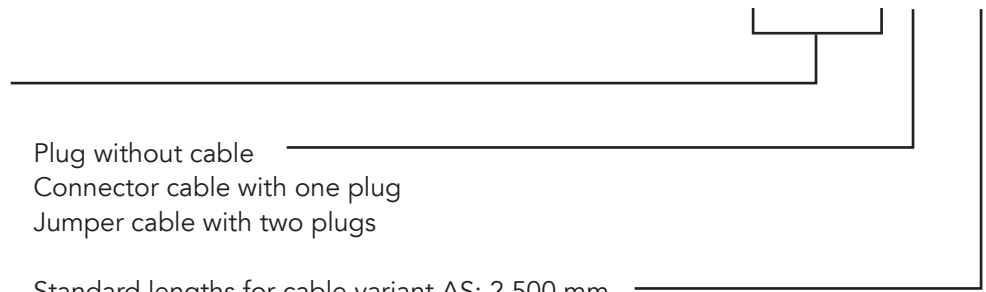
< 2,000 mm	+ 20 mm
≥ 2,000 mm, < 5,000 mm	+ 30 mm
≥ 5,000 mm, < 10,000 mm	+ 40 mm
≥ 10,000 mm	+ 50 mm

# UIC 552 M1 SERIES PLUG (S), CONNECTOR CABLE (AS) & JUMPER CABLE (VS)

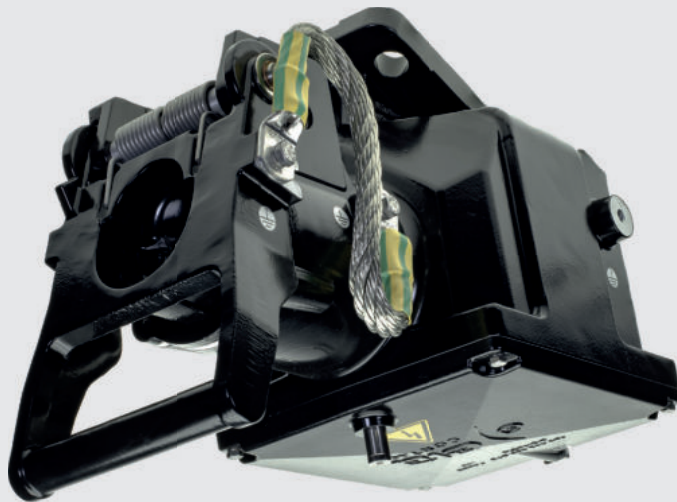
## Order options and key

### Example:

UIC 552 M1 connector cable with plug, 2,500 mm cable length

			UIC552-M1-AS-L2500
<b>Type</b>	UIC552-M1		
<b>Product</b>	<b>S</b> Plug without cable <b>AS</b> Connector cable with one plug <b>VS</b> Jumper cable with two plugs		
<b>Total length</b>	Lxxxx	Standard lengths for cable variant AS: 2,500 mm Standard lengths for cable variant VS: 1,500 mm (desired lengths on request)	
<b>Color option</b>	<b>RAL9005</b> Deep Black <b>RAL7023</b> Concrete Gray (Other colors on customer request)		

## UIC 552 M1 SERIES RECEPTACLE (KDO)

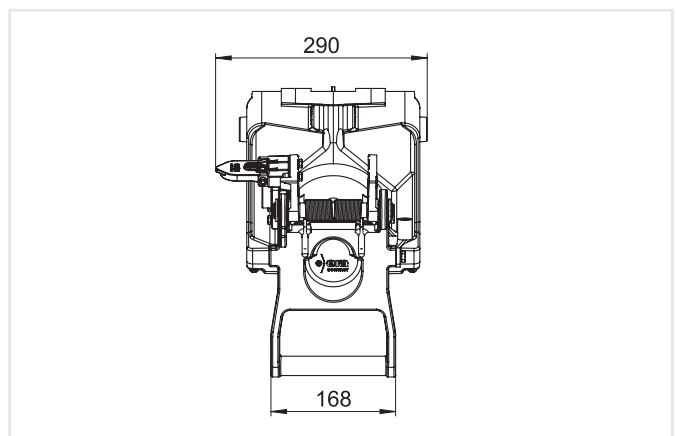
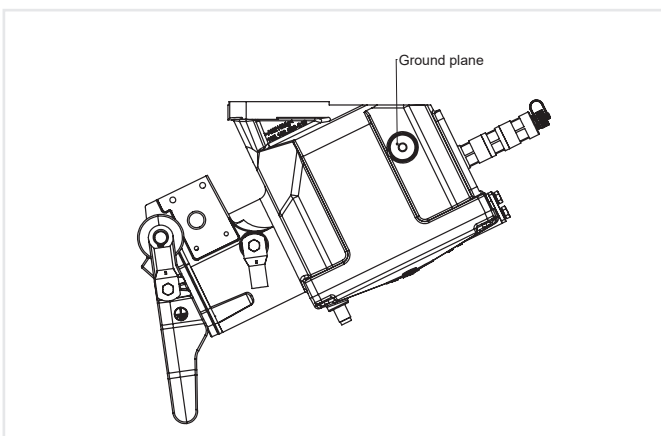
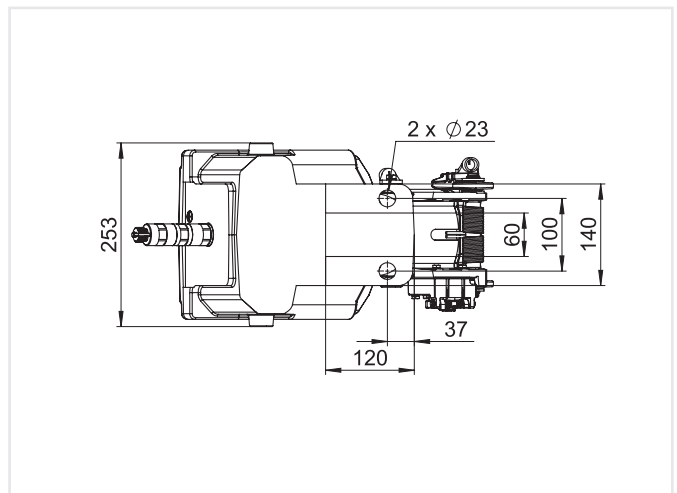
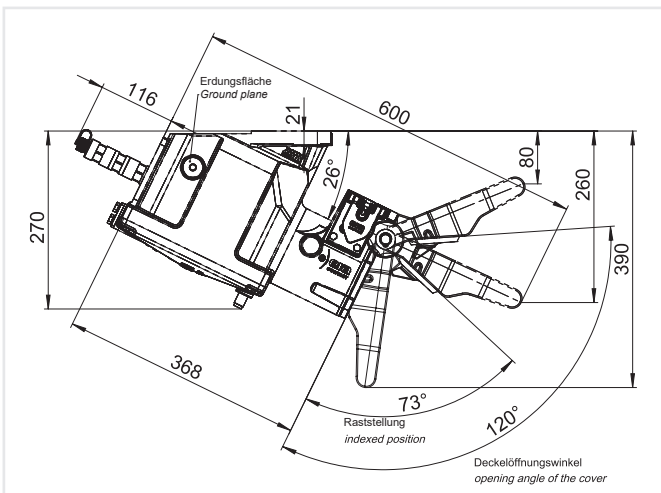


Receptacle UIC 552 M1: Deep Black, RAL 9005

### Product info

Our receptacle with its solid metal handle ensures a secure locking of the plug for a permanent use under rough conditions. The optional lock protects against unauthorized opening and is available mounted on the right or left side.

We also offer the receptacle optionally with a pilot contact.





## UIC 552 M1S SERIE RECEPTACLE (KDO)

### Option locking device (V)



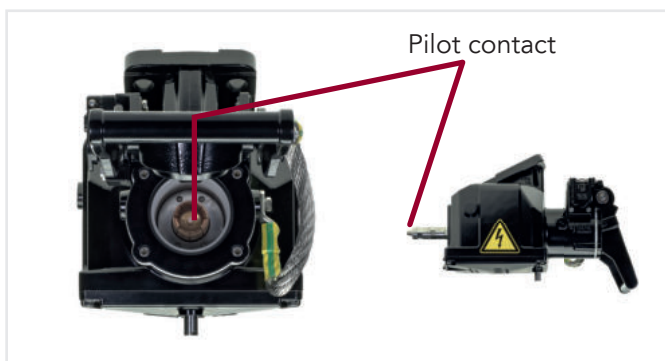
era-contact's UIC 552 M1 receptacle is symmetrical, i.e. the locking device can be mounted both on the left (VL) or the right (VR) side of the UIC552 M1 solution:

- UIC 552 receptacle is universally applicable
- Easy access to the locking device is ensured

### Accessories for locking device

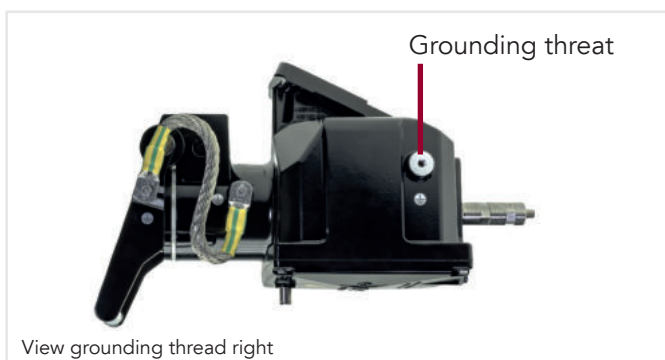
DESIGNATION	DESCRIPTION	ARTICLE NO.
Steel key	Key for UIC 552 locking device	124253

### Option pilot contact (P)



The UIC 552 M1 receptacle is available with (P1) and without (P0) pilot contact. The pilot contact is used to provide feedback regarding the presence of a plug.

### Grounding thread (E)



Grounding thread is located both on the right, as well as on the left side.

#### Size options:

- M10 (standard)
- M8 (possible on request)
- M12 (possible on request)

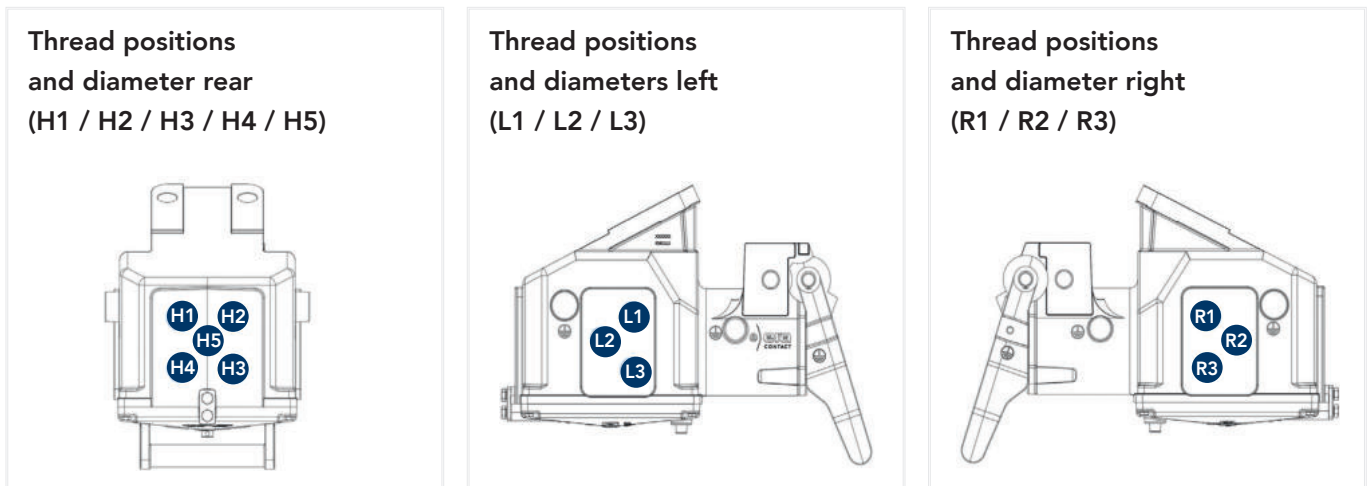
View grounding thread right

# UIC 552 M1 SERIES RECEPTACLE (KDO)

## Options threaded holes

Threaded holes for the receptacle (KDO) can be set at the rear, right, and left side of the receptacle. era-contact offers the following standard diameter sizes and combination options for the threaded holes.

For more sizes, please contact us to discuss the details.



## Combination options for threaded holes

	H1	H2	H3	H4	L1	L3	R1	R3	P	L2	R2	H5
2 Cable outlets	H1	not combinable	not combinable	combinable	not combinable	combinable	not combinable	not combinable	combinable	combinable	not combinable	combinable
H2	not combinable	not combinable	combinable	not combinable	not combinable	not combinable	combinable	not combinable	combinable	not combinable	combinable	combinable
H3	combinable	not combinable	not combinable	not combinable	not combinable	not combinable	combinable	not combinable	combinable	not combinable	combinable	combinable
H4	combinable	not combinable	not combinable	not combinable	combinable	not combinable	not combinable	not combinable	combinable	combinable	not combinable	combinable
L1	not combinable	not combinable	not combinable	combinable	not combinable	combinable	not combinable	not combinable	combinable	not combinable	combinable	combinable
L3	combinable	not combinable	not combinable	not combinable	combinable	not combinable	not combinable	not combinable	combinable	not combinable	combinable	combinable
R1	not combinable	not combinable	combinable	not combinable	not combinable	not combinable	not combinable	combinable	combinable	not combinable	combinable	combinable
R3	not combinable	combinable	not combinable	not combinable	not combinable	not combinable	combinable	not combinable	combinable	not combinable	combinable	combinable
1 Additional function	P	combinable	combinable	combinable	combinable	combinable	combinable	combinable	not combinable	not combinable	not combinable	not combinable
L2	combinable	not combinable	not combinable	combinable	combinable	combinable	not combinable	not combinable	combinable	not combinable	not combinable	not combinable
R2	not combinable	combinable	combinable	not combinable	not combinable	not combinable	combinable	combinable	not combinable	not combinable	not combinable	not combinable
H5	combinable	combinable	combinable	combinable	combinable	combinable	combinable	combinable	not combinable	not combinable	not combinable	not combinable

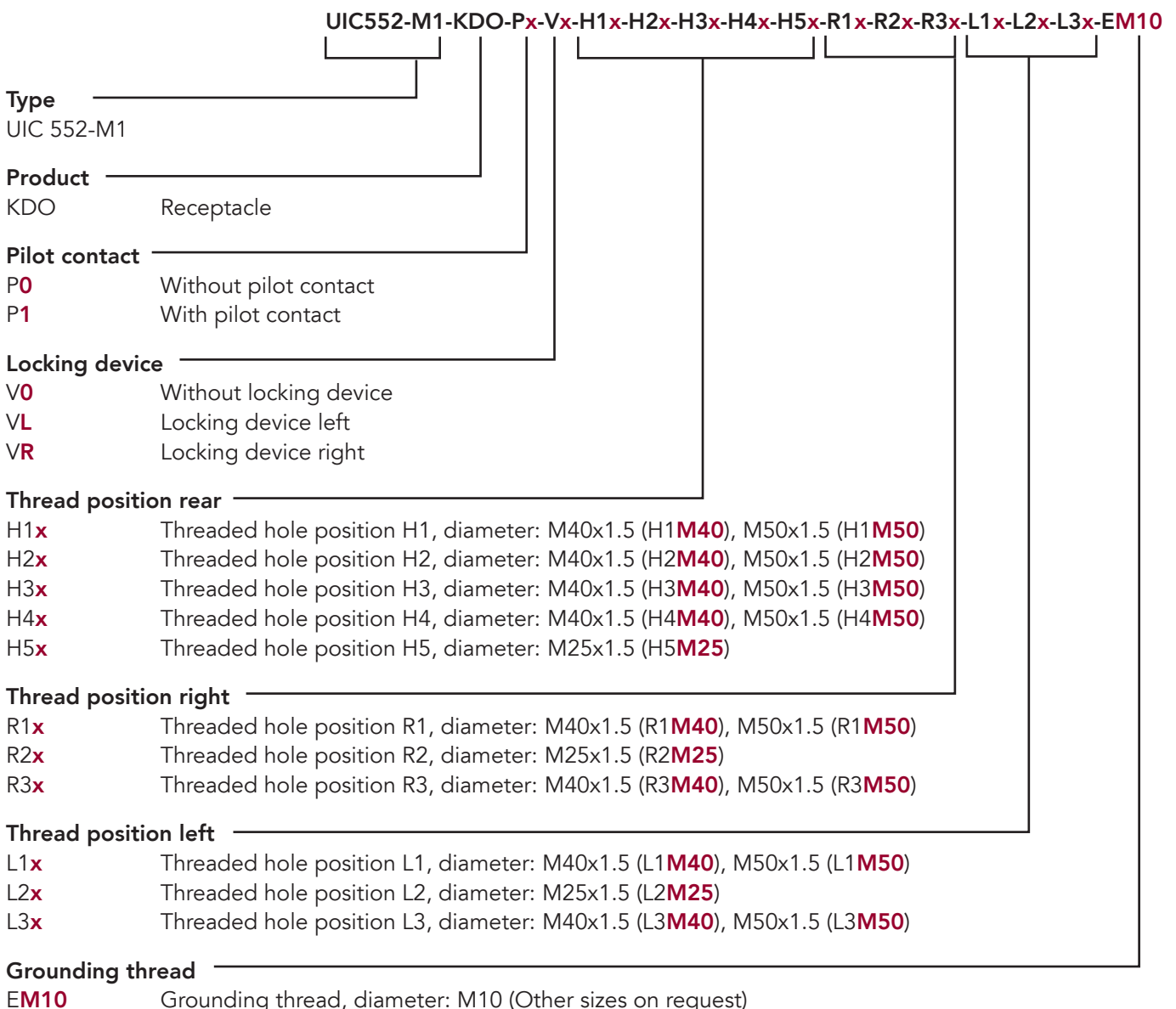
combinable  
 not combinable

# UIC 552 M1 SERIES RECEPTACLE (KDO)

## Order options and key

### Note

Due to the high variation possibilities in the assembly of the receptacle, the order key is generated for you by our sales team – this way it is possible to work out the best product and the most reasonable alignment for you. Please contact us.



### Color options

- RAL9005 Deep Black  
RAL7023 Concrete Gray (Other colors on request)

## UIC 552 M1 SERIES CABLE JUNCTION BOX (KAK)



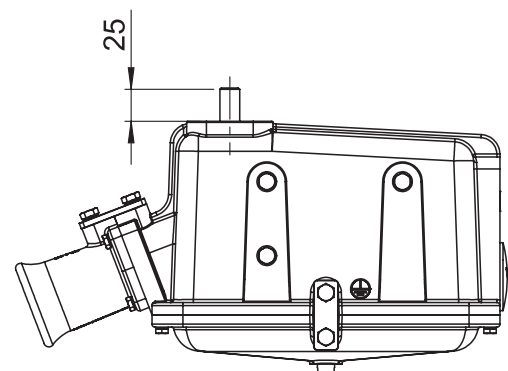
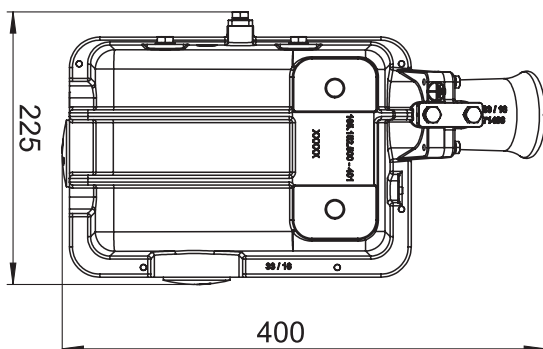
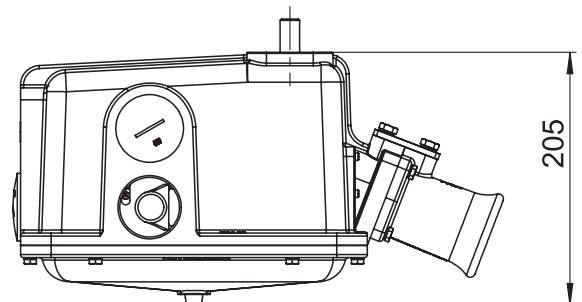
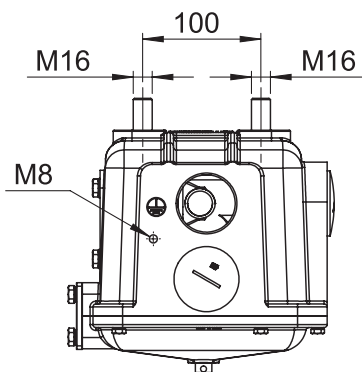
Cable junction box UIC 552 M1:  
Deep Black, RAL 9005

### Product info

Our robust cable junction box serves as a reliable interface for the easy and permanently safe connection of cables.

### Installation

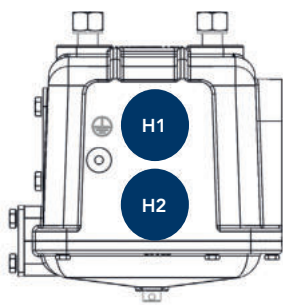
The cable junction box is mounted below the chassis. A terminal strip for the cable connection is integrated inside, which is accessible via the cover, which is screwed on from the outside.



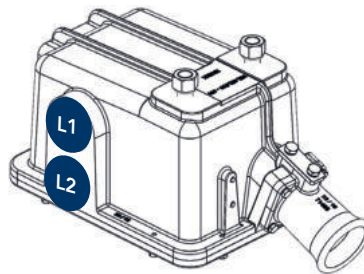
# UIC 552 M1 SERIES CABLE JUNCTION BOX (KAK)

## Options threaded holes

Thread positions and  
-diameter rear (H1 / H2)



Thread positions and  
-diameter left (L1 / L2)



Combination options for  
threaded holes

	H1	H2	L1	L2
H1				
H2				
L1				
L2				

2 Cable outlets

  combinable  
  not combinable

POS.	THREAD DIAMETER		POS.	THREAD DIAMETER	
H1	M40x1.5	M50x1.5	L1	M40x1.5	M50x1.5
H2	M40x1.5	M50x1.5	L2	M40x1.5	M50x1.5

(Other thread diameters on request)

## Grounding thread (E)



### Size options:

M8 (standard)

(Other thread diameters on request)

## UIC 552 M1 SERIES CABLE JUNCTION BOX (KAK)

### Order options and key

#### Note

Due to the high variation possibilities in the assembly of the cable junction box, the order key is generated for you by our sales team – this way it is possible to work out the best product and the most reasonable alignment for you. Please contact us.

		<b>UIC552-M1-KAK-H1x-H2x-L1x-L2x-EM8</b>		
<b>Type</b>	_____	_____	_____	_____
UIC 552-M1				
<b>Product</b>	_____	_____	_____	_____
KAK	Cable junction box			
<b>Thread position rear</b>	_____	_____	_____	_____
H1x	Threaded position H1, diameter: M40x1.5 (H1 <b>M40</b> ), M50x1.5 (H1 <b>M50</b> )			
H2x	Threaded position H2, diameter: M40x1.5 (H2 <b>M40</b> ), M50x1.5 (H2 <b>M50</b> ) (Other sizes on request)			
<b>Thread position left</b>	_____	_____	_____	_____
L1x	Threaded position L1, diameter: M40x1.5 (L1 <b>M40</b> ), M50x1.5 (L1 <b>M50</b> )			
L2x	Threaded position L2, diameter: M40x1.5 (L2 <b>M40</b> ), M50x1.5 (L2 <b>M50</b> ) (Other sizes on request)			
<b>Grounding thread</b>	_____	_____	_____	_____
EM8	Grounding thread, diameter: M8 (Other sizes on request)			

#### Color options

RAL <b>9005</b>	Deep Black
RAL <b>7023</b>	Concrete Gray
	(Other colors on request)

# UIC 552 M1 SERIES JUNCTION BOX (AZK)

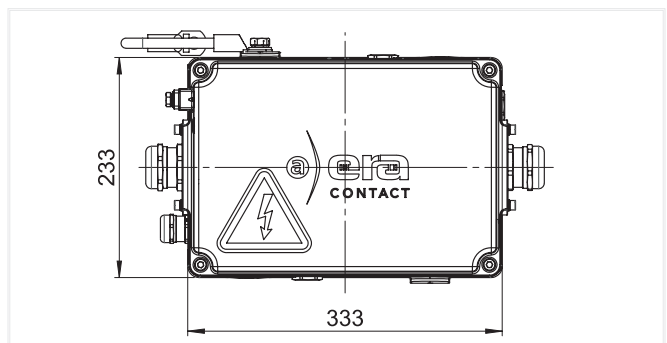
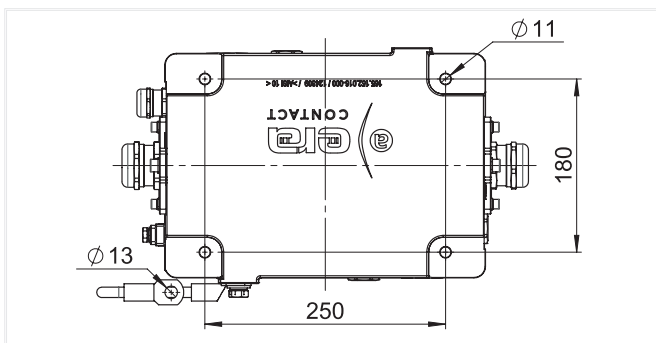


Junction box UIC 552 M1: Deep Black, RAL 9005

## Product info

Our junction box serves as a reliable interface to connect cables between cable junction boxes and other cables for power transmission.

Optional with flange (F):  
Enables the assembly of pre-assembled cables.



## Grounding thread (E)

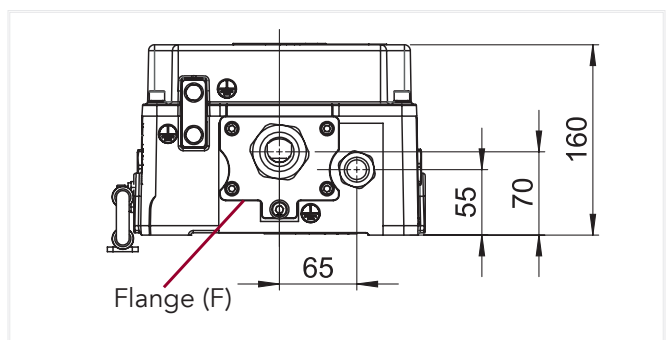
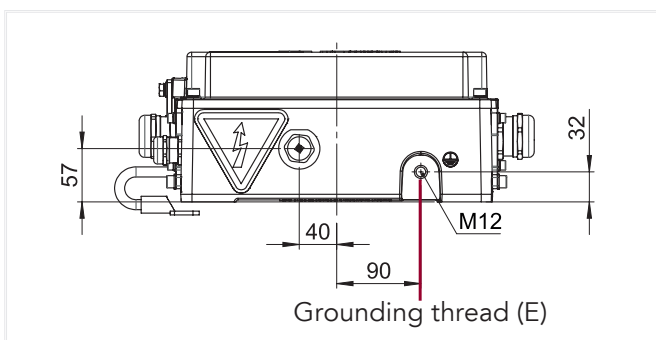
Grounding thread is located both on the right, as well as on the left side.

## Size options:

M12 (standard) (Other sizes on request)

## Flange option (F)

The junction box is available with (F1) and without flange (F0).



## UIC 552 M1-SERIE JUNCTION BOX (AZK)

### Order options and key

#### Note

Due to the high variation possibilities in customization, the junction box (AZK) of the UIC 552 series M1 will be adapted according to your requirements – we will work out the technical product design together with you in order to produce the best product for you.

#### Example:

UIC 552 M1 junction box with flange and M50 thread in RAL 7023 (Concrete Gray)

			UIC552-M1-AZK-F1-M50-EM12
<b>Type</b>	UIC 552 M1	_____	_____
<b>Product</b>	AZK	Junction box _____	_____
<b>Flange</b>	F0 F1	Variant without flange _____ Variant with flange (Enables mounting of pre-assembled cables in the AZK)	_____
<b>Thread size flange</b>	M40 M50	Thread M40x1.5 _____ Thread M50x1.5 (Other thread sizes on request)	_____
<b>Grounding thread</b>	EM12	Grounding thread, _____ diameter: M12 (Other sizes on request)	_____
<b>Color options</b>	RAL9005 RAL7023	Deep Black Concrete Gray (Other colors on request)	



# UIC 552 M1 SERIES DUMMY RECEPTACLE (BDO)



UIC 552 M1 dummy receptacle: Deep Black, RAL 9005

## Product info

For long-lasting functionality, our proven dummy receptacle serves as a receptacle for the plug in order to protect it from unwanted external influences when not coupled.

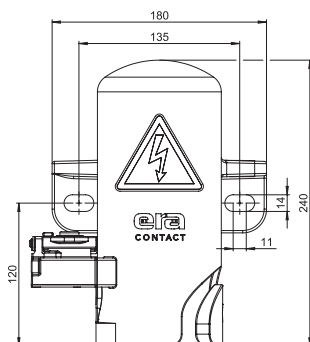
## Installation

The plug is locked in the dummy receptacle via a bayonet lock.

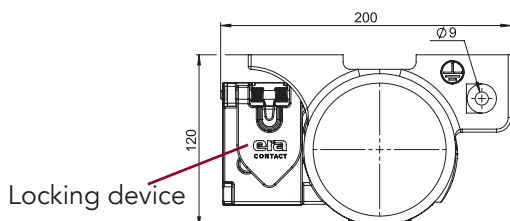
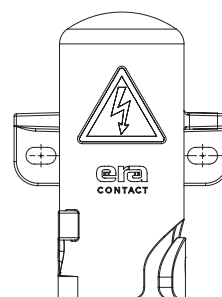
## Option locking device (V)

The dummy receptacle is available with (V1) and without (V0) a locking device.

### Dummy receptacle with locking device (V1)



### Dummy receptacle without locking device (V0)



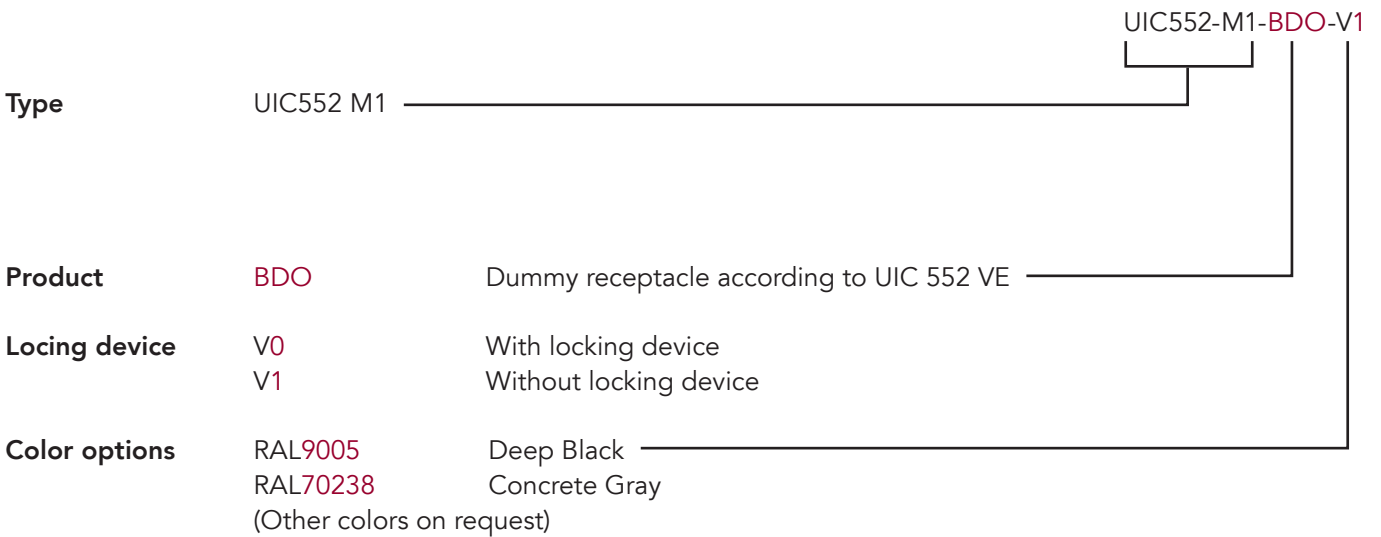
# UIC 552 M1 SERIES DUMMY RECEPTACLE (BDO)



## Order options and key

### Example:

UIC 552 M1 dummy receptacle with locking device



## Accessories

DESIGNATION	DESCRIPTION	ARTICLE NO.
Steel key	Key for UIC 552 locking device	124253



## MORE BENEFITS FOR YOU:

- Punctuality
- Consistently high quality all over the world
- Comprehensive service wherever you are in the world
- Years of expertise for your product
- International presence
- On-site engineering service – from prototyping to after-sales
- Original manufacturer
- A team just for you



A company of



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