

# RD6 Resistances

## ON-BOARD RESISTANCES

## ELECTRICAL BONDING RESISTANCES



### FEATURES & BENEFITS

- Compact
- Light weight
- Shock resistant to harsh conditions

### APPLICATIONS

- Electrical bonding resistance between car body and bogie for bearings not equipped of an ERCU

If we do not take any special provisions, axle boxes bearings are mounted in parallel to ERCU's.

Two parallel currents will then be established. One across the ERCU and the other through the bearings of the axle boxes. The current will flow through these 2 circuits inversely to the value of the impedances.

When the train is stopped, the bearings are less resistant than the ERCU, they will be crossed by a considerable current coming from "auxiliary" circuits and in addition, the high starting current.

When rotating the bearings become approximately 80 times more resistant compared against the stopped position and it will be the ERCU which will have the lowest impedance, but the remaining current which will pass through the rolling is enough to cause serious damage.

To avoid this phenomena, each axel box unequipped of ERCU is provided with an additionnal bonding resistance installed between the car body and the bogie to increase the resistance and make the current flow through the bearing equipped with and Earth Return Current Unit.

no current will be diverted through bearings w/o ERCU.



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## PRODUCT RANGE

### RD6

Catalog number	Item number	Package	Resistance value	Tolerance	Weight
RD6 R0,04/10 EPAIS:10	N1048421A	30 pcs	0.04 ohm	± 10%	40 g
RD6 R0,04/20 EP:10	X202443A	30 pcs	0.04 ohm	± 20%	40 g
RD6 R0,05/20 EPAIS:10	Y202444A	30 pcs	0.05 ohm	± 20%	40 g
RD6 R0,10/10 EPAIS:10	P1048422A	30 pcs	0.1 ohm	± 10%	40 g

## TECHNICAL DATA

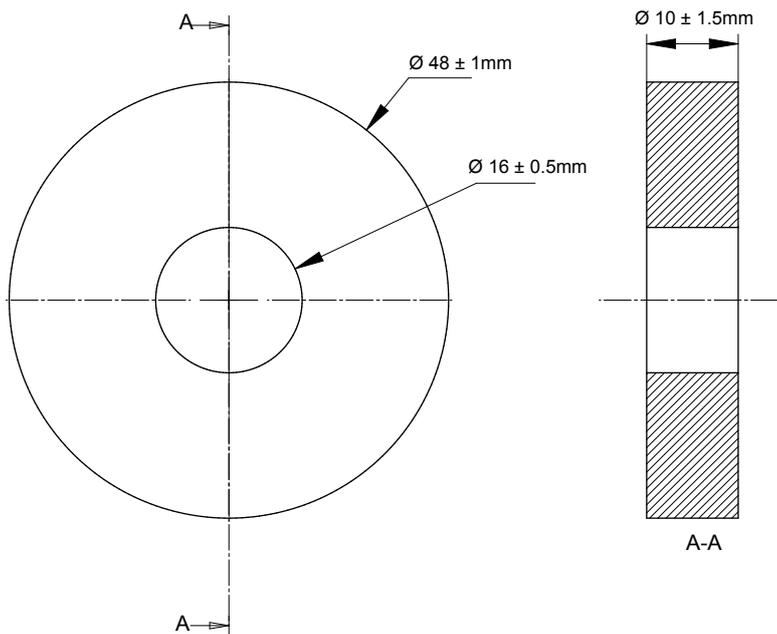
### RD6

Mounting

Screw mounting with 10Nm torque without grease

## DIMENSIONS

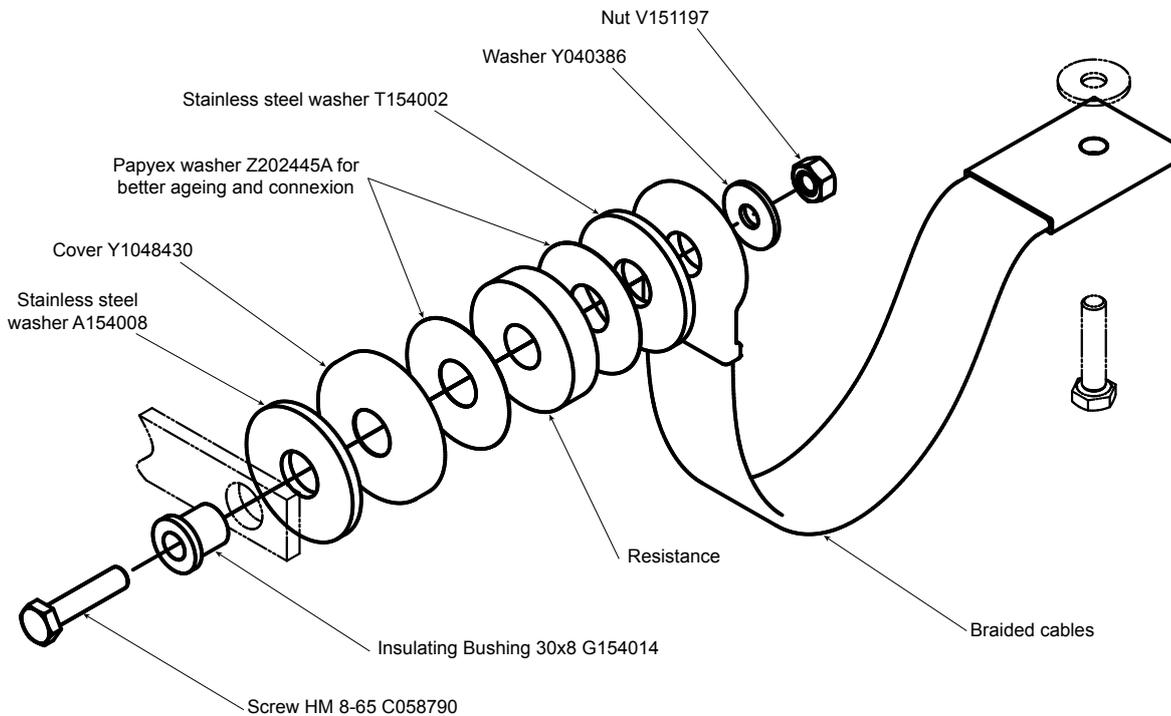
### RD6 Dimensions



# RD6 Resistances

## DIMENSIONS

**RD6 mounting principle (Kit L208965A : resistance X202443A and screw M10)**



## FUNCTIONS



### Connexion cables + Braided cable

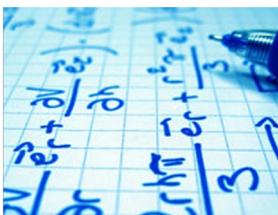
Connexion cables or braided cables are studied for your application. Mersen can supply and guarantee them.

They are delivered with the possibility to customized the total length plus the adapted hardware for bolted joint.



### Training and technical support

All around the world, Mersen technical team can help you for technical support and can offer you customized training sessions for your Maintenance team.



### LCC; RAMS; Type tests

Mersen teams can supply Life Cycle Costs "LCC" and Reliability Availability Maintainability Safety "RAMS" and Faillure Mode and Effect Analysis "FMEA" studies. They can operate Qualification type tests.

## ACCESSORIES



Silohm resistances

### Silohm resistances

Catalog number	Item number	Weight
COVER 8x53	Y1048430	10 g
INSULATING BUSHING 30X18	G154014	25 g
PAPYEX WASHER EP:0,4 48MM	Z202445A	5 g
STAINLESS STEEL WASHER 12X50	T154002	50 g
STAINLESS STEEL WASHER 17X50	A154008	50 g

### Cables

Braided cables
Braided cables



Connexion cables