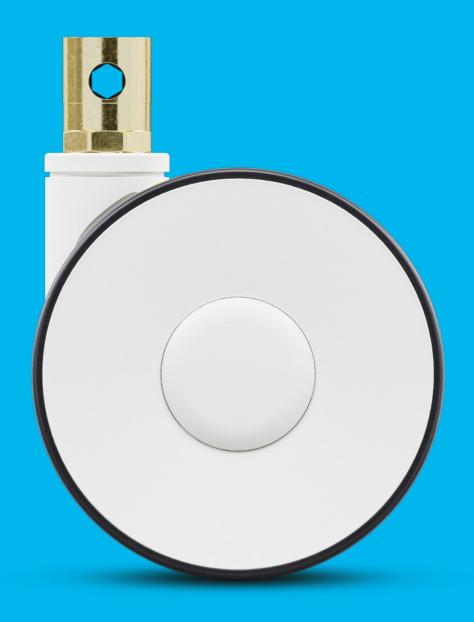
## **PRODUCT INFORMATION LINEA CLINIC**







## **LINEA CLINIC** Castors for loads up to 150 kg.



**HOUSINGS** Pages: 10-15



**WHEELS** Pages: 16-19



**FITTINGS** Pages: 20-23

LINEA CLINIC LOAD
Castors with high torsional stability for loads up to 200 kg.



**LOAD VERSION** 

Pages: 24-27

## MOBILITY FROM THE WORLD MARKET LEADER

TENTE believes in smart mobility solutions which noticeably improve people's lives and their working environment. As the world market leader in hospital bed castors, we have developed many customer-focussed solutions which increase productivity, ensure safety and open up new horizons in matters of design, durability as well as environmental friendliness. Leading manufacturers and companies of different industries rely on these competencies and our high production quality.

On the following pages you will find technical information about our Linea clinic product family. We will also demonstrate the added value this mobility solution offers to your organisation. Features include:

## **Electronic locking system**

Swivel castor Linea e-lock with integrated programmable electronic locking system, total or directional lock.

#### Reduced risk of accidents

Extremely low height to reduce the risk of accidents when fitted to hospital beds.

### Quiet and smooth actuation

Very low actuation forces ensure smooth and guiet operation.





# USER-FRIENDLY CENTRAL LOCK

We offer two types of central locking Linea castors, one with a mechanical and one with an electronic central lock. Each version offers different types of locking: directional lock, total lock or freely manoeuvrable.



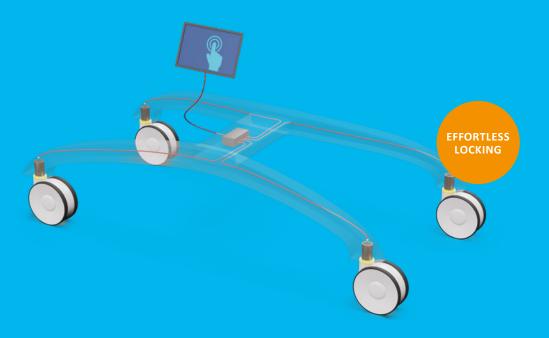
## **Mechanical locking with Linea clinic**

Pressing foot pedal ensures mechanical locking. All castors are centrally locked at the same time.



## **Electronic locking with Linea e-lock**

Lock wheels electronically with no physical effort. Each switching position can be individually controlled. The steel bars and foot pedals are no longer required which opens up new possibilities regarding the design of new beds and other types of applications.



# INCREASE SAFETY WITH LINEA CLINIC

The Linea clinic castor makes it possible to significantly enhance safety and reduce the risk of injury. Thanks to its reduced overall height, the application height can be lowered to a minimal level. Additionally, twin wheel castors offer optimal manoeuvrability and an easy and quiet actuation.



## **FEATURES**



## **Certified safety**

TÜV Süd certified performance standard for hospital bed castors.



## **Intregrated** cable protection

Integrated cable pusher to protect cables lying on the floor.



## **Permanent** washability

The castors are quick and easy to clean. Washable versions have metal components made of stainless steel.



## **Colour matching**

Colours can be adapted to match the product design. Standard colours:



RAL 9006 RAL 9002





## **Chemical-resistant** components

Resistant to many cleaning agents and chemical substances.



## **Tested quality**

Tested in our own laboratory for compliance with European standards.

# INCREASE EFFICIENCY WITH LINEA E-LOCK

The Linea e-lock is a further development of the tried and tested Linea range. The locking system is integrated into the castor and the locking functions are controlled electronically. This saves time and increases the efficiency. Switching forces and switching torque are no longer required. Each switching position can be individually controlled. The controls are freely programmable and can be operated via Bluetooth or radio or using an app. The e-lock also has the advantage of a quiet switching and a particularly low rate of mechanical wear and tear. The removal of the pedal and steel bars gives designers maximum flexibility and has allows for greater freedom over design.





## **Easy integration**

The control function can also be integrated into existing operating panels. The controls are freely programmable and can be operated via Bluetooth or radio or using an app.



## **Easy locking**

The locking functions are electronically controlled. Switching forces and switching torque are no longer required. Each switching position can be individually controlled.



## **Quiet operation**

Quiet locking with a particularly low rate of mechanical wear and tear.



## **Increased safety**

Movement sensor can activate the lock automatically. This makes it impossible to forget to lock the castors. The movement sensor needs to be provided by the customer.



## **Emergency release**

In the event of a power cut, the castor can be manually unlocked. The emergency release can be automatically reset during the motor's reference run as soon as power is available again. This can be programmed by the customer.



## Activation of the emergency release

Mechanical unlocking of e-lock possible. Turn the button 90° clockwise to manually unlock the directional lock. Turn the button 90° anti-clockwise to manually unlock the total lock.



#### Admission control

Customers can set up the system so that only an authorised person is able to lock and release the castors. This needs to be programmed by the customer.



## **Design freedom**

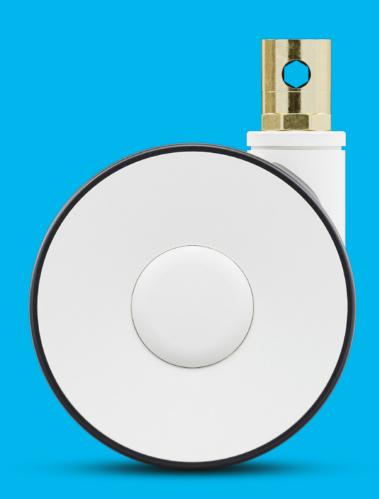
Opens up new possibilities regarding the design of new beds, thanks to the elimination of the steel bars and foot pedals.



## Contact-free operation

Contact-free operation to increase hygiene standard.

# HOUSINGS



## **FEATURES**



## Optimised steering mechanism

Directional lock for improved steering around bends, as well as moving in a straight line for long distances.



## Practical system solution

Practical system solution with all technical components for central locking.



## User-friendly central lock

Simultaneous locking of more than one castor using a central actuation lever.



## **Efficient operation**

Optional: swivel castor with an integrated, programmable electronic locking system - with either total or directional lock. See page 8.



## Multistage switching function

Up to three locking positions: directional lock, total lock or free mobility.



## Reduced risk of accidents

Extremely low height to reduce the risk of accidents when fitted to hospital beds.



#### Secured stand

Total lock for simultaneously locking the wheel and swivel housing.



#### **Secure lock**

On request: Only starts rolling when a lever or handle is activated by the user. Unintentional movement is effectively prevented. Contact us for more information.



## **Robust housing**

Twin wheel castor for high load capacity and low height.

## **HOUSINGS**

The low height twin wheel housing is made from high grade synthetic material, so it is very robust and perfect for a heavy load capacity. You'll benefit from maximum manoeuvrability, even in narrow spaces, thanks to the differential effect. Up to three switching positions are possible: directional lock, total lock or free to move, and these can be activated manually or electronically. The Linea clinic also contains conductive versions to protect users and electrical devices from electrostatic discharge. Washable versions or models with integrated cable protectors are also available.

#### **Swivel castor**

Wheel and housing are free to move for an easy manoeuvrability.



#### Central total and directional lock

User-friendly central lock for simultaneous locking of more than one castor. Combined directional lock for improved steering around bends, as well as movement in a straight line over long distances. Total lock for simultaneously locking the wheel and swivel bearing to allow for secure standing.



The materials are tested in our own laboratory for compliance with European standards. Non-hazardous materials are used in order to comply with the RoHS directive and REACH regulation of the European Union. These do not contain polycyclic aromatic hydrocarbons or chromium (VI). All components are chemical-resistant and unaffected by many cleaning agents and chemical substances. The castors are quick and easy to clean thanks to their predominantly smooth surfaces.



#### **TÜV** certified



The performance standard of these castors even surpasses the requirements of the regulations set out in European standard DIN EN 12531.



#### Integrated cable protection

We offer an integrated cable pusher to help protect lying cables on the floor and to avoid interruptions during transportation. This cable pusher can be already mounted ex works.

## Housings for loads up to 150 kg







i	Housing type	Swivel castor	Swivel castor with central total or directional lock	Swivel castor with central total lock
	Article description	5940	5944	5946
	Housing material	Polyamide	Polyamide	Polyamide
ion	Swivel bearing	Two precision ball bearings	Two precision ball bearings	Two precision ball bearings
Description	Washable*	Washable and non-washable	Washable and non-washable	Washable and non-washable
	Wheel Ø 125 mm	205 mm	205 mm	205 mm
Swivel	Wheel Ø 150 mm	245 mm	245 mm	245 mm

Items with this sign "-" are not available in our standard range. Please contact us.

 $<sup>{\</sup>color{blue}*} \ Washable \ versions \ with \ metal \ components \ made \ of \ stainless \ steel. \ Washable \ castors \ must \ be \ sealed \ in \ the \ fitting \ area \ by \ the \ customer.$ 



#### **Automatic mechanical locking system**

The Linea clinic 'safety' model offers automatic mechanical locking. This ensures that castors are locked as soon as a lever or handle is released, preventing operation errors and accidents. With this, nothing can roll away and no-one can fall when leaning against an application. Solutions are adapted to fit specific customer needs. Please contact us to discuss your project.



#### Wide range

Find castors with even higher load capacity from page 24 onwards or request the Linea brochure if you are searching for Linea products with a smaller diameter.



Swivel castor with electronic locking system, central total or directional lock

594E

Polyamide

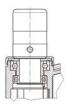
Two precision ball bearings

Protection class IPX4: Protects from splashing water

-

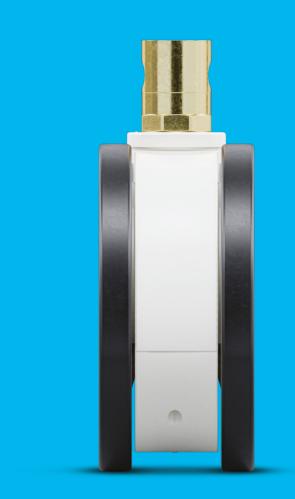
245 mm

#### **Swivel bearing**



Precision ball bearing for best manoeuvrability.

# WHEELS



## **FEATURES**



## Optimised manoeuvrability

Twin wheel castor with high manoeuvrability due to differential effect.



## **Certified conductivity**

Conductive version to protect users and electrical devices from electrostatic discharge.



## Non-marking movement

Wheels with reduced abrasion and little cleaning requirement.



## Individual branding

Can be printed with a logo. On request, customers can also apply different prints themselves.



## Permanent washability

Optional: castors with stainless steel bearing for permanent washability.



## Non-staining operation

Non-staining on contact with floors during long standing periods. Can also be used for floors made of untreated wood and natural stone.

## **WHEELS**

The characteristics of these wheels depend on the material and and the bearing. These wheels ensure reduced abrasion and low maintenance. They are non-staining and insensitive to many cleaning agents and chemical substances.



## **Technical data and availability**



i	Product name	Maxtech	Maxtech conductive	Maxtech stainless
	Article description	UAP	USC	UAC
	Tread material	Polyurethane	Polyurethane	Polyurethane
	Tread hardness	Shore D 42	Shore D 42	Shore D 42
	Wheel body material	Polyamide	Polyamide	Polyamide
	Temperature range	-10 °C / +40 °C	-10 °C / +40 °C	-10 °C / +40 °C
	Width of tread	15 mm	15 mm	15 mm
Description	Electric conductive (10 <sup>4</sup> OHM)	-	•	-
Descri	Washable*	-	•	•
	Plain bearing	-	-	-
	Roller bearing	-	-	-
g type	Cone ball bearing	-	-	-
Bearing type	Precision ball bearing	•	• Stainless steel	• Stainless steel
₹ *	Wheel Ø 125 mm	150 kg	150 kg	150 kg
Load capacity**	Wheel Ø 150 mm	150 kg	150 kg	150 kg
_				

Items with this sign " ● " are available. Items with this sign "-" are not available in our standard range. Please contact us.



The load capacity depends on the housing and wheel. It has been tested and fulfills the requirements according to EN 12531 at a speed of 4 km/h. When using four castors, you can calculate the necessary load capacity as follows: The sum of the weight of your application plus the additional load divided by three castors.

 $\frac{\text{Weight of application} + \text{load}}{3} = \frac{\text{Load capacity}}{\text{of one castor}}$ 

#### **Bearing types**



Precision ball bearing for highest performance.

<sup>\*</sup> Washable versions with precision ball bearing made of stainless steel. Washable castors must be sealed in the fitting area by

<sup>\*\*</sup> Load capacity according to DIN 12531.

# FITTINGS



## **FEATURES**



## **Quiet and smooth actuation**

Little effort and noise needed to activate castors - which ensures a quiet and smooth use.



## Reduced risk of accidents

Extremely low height fitting to reduce the risk of accidents when fitted to hospital beds.



## **Fast assembly**

Faster assembly thanks to an easy, quick-fitting solution.

## **SOLID STEM FITTINGS**

We offer bright zinc plated and blue passivated solid stem fittings which are easy to mount in tubes. The swivel castors have two locking positions: directional lock or total lock. The castors can be locked centrally with a profile bar or with an electronic locking system.

#### Stems with central locking function

Choose between a mechanical or electronic activation. Both versions allow a central total lock or central total and directional lock.





## Technical data and availability





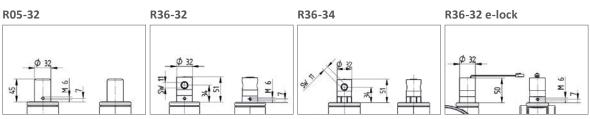




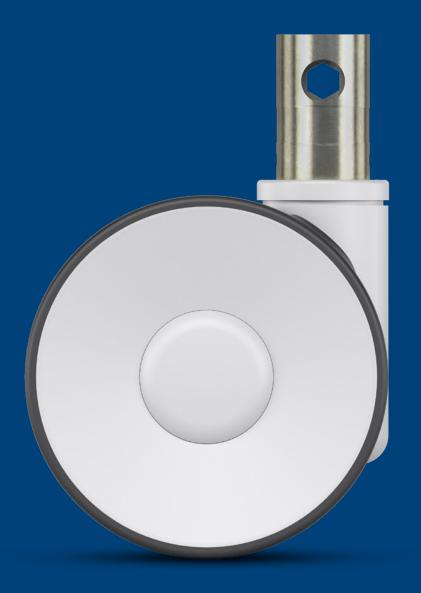
i	Fitting type	Solid stem	Stem with central total lock or central total and directional lock	Stem with central total lock or central total and directional lock	Solid stem with electronic central total and directional lock
	Article description	R05-32	R36-32	R36-34XS	R36-32
	Quick fitting	-	-	•	-
	Thread for fixation screw	M6	4 x M6	Additional fixation not necessary	2 x M6
	Thread position from bottom	7 mm	7 mm	-	7 mm
	Solid stem Ø	32 mm	32 mm	32 mm	32 mm
	Solid stem length	45 mm	50 mm	42 mm	50 mm
	Shifting angles for actuation forces	-	30°	30°	-
	Number of springs	-	3 springs for easier locking and unlocking of the castor or 4 springs for standard	3 springs for easier locking and unlocking of the castor or 4 springs for standard	-
	Power supply	-	-	-	24 V/DC supply voltage 1,6 A max. motor stream
Description	Electrical connection	-	-	-	Connector 03R-JWPF-VSLE-S, 1 VDD power supply (+), 2 IO 1 wire serial interface, 3 GND supply and system ground
	Wheel Ø 125 mm	130 mm	130 mm 150 mm	130 mm	-
Overall height	Wheel Ø 150 mm	155 mm	155 mm 175 mm	155 mm	155 mm

Items with this sign " • " are available. Items with this sign "-" are not available in our standard range. Please contact us. Washable castors must be sealed in the fitting area by the customer.

#### **Technical drawings**



# LINEA CLINIC LOAD



## **HOUSINGS**

This castor has the same characteristics as the Linea clinic, but with high torsional stability and higher load capacity of up to 200 kg. This extreme torsional rigidity ensures that operating tables or heavy applications have a secured standing.

## Housings with high torsional stability for loads up to 200 kg



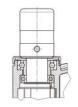




i	Housing type	Swivel castor	Swivel castor with central total or directional lock	Swivel castor with central total lock
	Article description	5980	5984	5986
	Material	Polyamide	Polyamide	Polyamide
ption	Swivel bearing	Two precision ball bearings	Two precision ball bearings	Two precision ball bearings
Description	High torsional stability	•	•	•
ance (S)	Wheel Ø 125 mm	-	-	-
Swivel interference	Wheel Ø 150 mm	245 mm	245 mm	245 mm

Items with this sign "  $\bullet$  " are available. Items with this sign "-" are not available in our standard range. Please contact us.

#### **Swivel bearings**



Precision ball bearing for best manoeuvrability.

## **Wheel versions**





i	Product name	Maxtech	Maxtech conductive
	Article description	UAP	XSP
	Tread material	Polyurethane	Polyurethane
	Tread hardness	Shore D 42	Shore D 42
	Wheel body material	Polyamide	Polyamide
	Temperature range	-10 °C / +40 °C	-10 °C / +40 °C
ption	Width of tread	15 mm	15 mm
Description	Electric conductive (10 <sup>4</sup> OHM)	-	•
	Plain bearing	-	-
a	Roller bearing	-	-
ng typ	Cone ball bearing	-	-
Bearing type	Precision ball bearing	•	•
S *	Wheel Ø 125 mm	-	-
Load capacity*	Wheel Ø 150 mm	200 kg	200 kg

#### Bearing types



Precision ball bearing for highest performance.

Items with this sign " lacktriangle " are available. Items with this sign "-" are not available in our standard range. Please contact us.



#### Load capacity

The load capacity depends on the housing and wheel. It has been tested and fulfills the requirements according to EN 12531 at a speed of 4 km/h. When using four castors, you can calculate the necessary load capacity as follows: The sum of the weight of your application plus the additional load divided by three castors.

 $\frac{\text{Weight of application} + \text{load}}{3} = \frac{\text{Load capacity}}{\text{of one castor}}$ 

 $<sup>^{</sup>st}$  Load capacity according to DIN 12531.

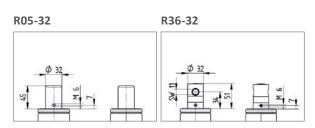
## **Fitting versions**



i	Fitting type	Solid stem	Solid stem with central total and directional lock
	Article description	R05-32	R36-32
	Thread for fixation screw	M6	M6
	Thread position from bottom	7 mm	7 mm
	Solid stem Ø	32 mm	32 mm
ption	Solid stem length	45 mm	50 mm
Description	Shifting angles for actuation forces	-	30°
	Wheel Ø 125 mm	-	-
Overall height	Wheel Ø 150 mm	155 mm	155 mm

Items with this sign "-" are not available in our standard range. Please contact us.

### **Technical drawings**



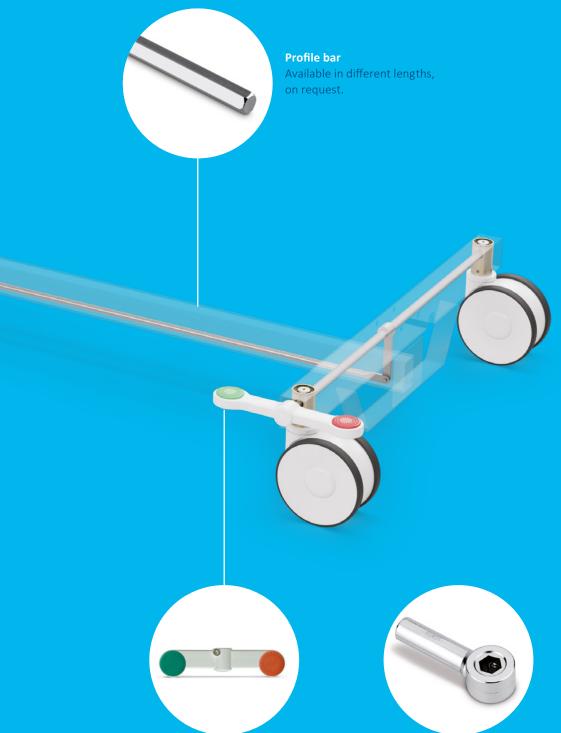
## **ACCESSORIES FOR CENTRAL LOCKING**

Our central locking components offer a practical solution for your needs. Please contact us for further advice.



from the foot end to the head end. It is available in three different sizes.





#### **TENTE lever**

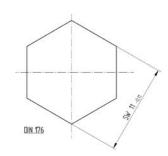
All change levers will be delivered with a stainless steel screw. They are available as a single or double lever for the right and left side. We offer plugs in different colours.



**Optional: adaptor for customer levers** This round adaptor accepts customer made levers.

# TECHNICAL DATA ACCESSORIES

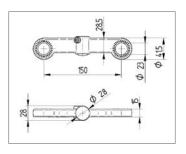
# Profile bar Article description Wrench size Material Length Profile bar Profile bar On request



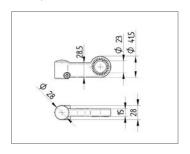
	TENTE levers	0 0	9	
(i)	Change lever type	Double lever	Lever	Lever
	Article description	Double lever	Lever	Lever 180
	Compatible with product	30° or 45°	30° or 45°	30° or 45°
	Material	Fibreglass- reinforced polyamide	Fibreglass- reinforced polyamide	Fibreglass- reinforced polyamide
u	Version	Left version Right version	Left version	Right version
Description	Width	41,5 mm	41,5 mm	41,5 mm
Des	Length	191,5 mm	95,75 mm	95,75 mm

# Standard lever colours More colours on request. RAL 7035 Eloxal silver Standard plug colours More colours on request. RAL 6016 RAL 3016 RAL 9011

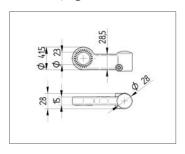
#### **Double lever**



#### Lever, left version



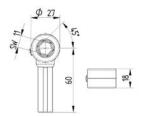
Lever 180, right version



## Adaptor for customer levers



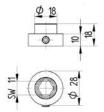
i	Article description	Adaptor
	Wrench size	11
	Material	Zinc die cast



## **Bearing guide**



i	Article description	Bearing guide
	Wrench size	11
	Material	Zinc die cast



## **Change lever**

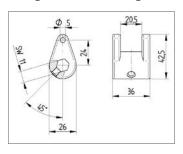




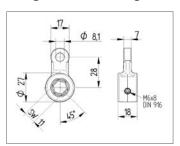


i	Article description	Change lever	Change lever	Change lever
	Wrench size	11	11	11
	Material	Zinc die cast	Zinc die cast	Zinc die cast
	Length	24 mm	28 mm	65 mm

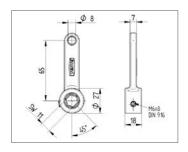
#### Change lever 24 mm length



#### Change lever 28 mm length



### Change lever 65 mm length



## **DIVERSITY WITH A SYSTEM OUR CASTORS**

All of our products have their own specific qualities and strengths. Whether it's high design standards, specialist applications or exceptional load capacities – our range can meet your needs and can be adapted to fit different models.

From the correct dimensions and technical specifications to the required configuration, our product families are able to offer the ideal solution – whatever you need. Contact us for more information or visit our website: www.tente.com



300 - 2.000 kg

Ø 80 - 300 mm

8 360 - 750 kg

200 mm

**Delta twin** 

**Omikron** 

8 900 - 11.000 kg

Ø 100 - 500 mm

**△** 300 - 800 kg

125 - 250 mm

# Radiata 1.200 - 1.500 kg @ 80 mm Linea clinic 8 150 - 200 kg











Integral

**Integral twin** 





## **EXPERTISE THAT INSPIRES**

#### **CONTACT US**

We are a globally operating company supporting you on five continents. This means on-site support with service on a level playing field — along with in-depth knowledge. Additionally, our solution experts will advise you on the best mobility concept for your needs. Go here to find your nearest TENTE location: www.tente.com/locations

#### **INCREASE YOUR EFFICIENCY**

Our intelligent mobility solutions help you save time, effort, energy, and operating expenses. This allows you to improve your operating methods and working conditions, thereby optimising your processes and ensuring higher productivity, profitability and safety. Ask for our solutions catalogue or read about how our customers benefit from our tailor-made solutions on our website: www.tente.com/solutions

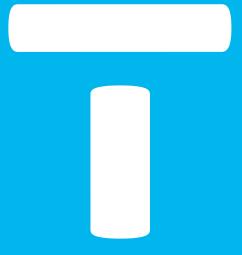
#### SAVE DEVELOPMENT TIME

On our website you will find technical drawings, product data sheets and 2D and 3D CAD files in various formats: www.tente.com/linea

#### **GET MORE INFORMATION**

In addition to our informative website, you can easily download various catalogues and brochures on mobility solutions, customer references, and much more: www.tente.com/download





www.tente.com









