



**Catalogue 2018 /A**

# **TRIPODS**

PERSONAL TRIPODS | MATERIAL TRIPODS  
PERSONAL AND MATERIAL COMBO TRIPODS | RESCUE DEVICES & LIFTING DEVICES  
TRIPODS SETS



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Catalogue 2018 /A

# TRIPODS

# PERSONAL TRIPODS

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| TM 6   | 8  |
| TM 7   | 10 |
| TM 9   | 12 |
| TM 9-L | 14 |
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# TM 1



Pulley has 2 anchor points. Upper anchor point on pulley is used for connecting crane TM 1 to a permanent structure. Lower anchor point on arm is used for installation of rescue lifting devices.



Leg is made of hot-dip galvanized steel, has 4-step adjustment, and is locked with a cotter.



Connector enables adjustment of the arm angle and locking in one of 5 positions (from 80° up to 130°) by means of a cotter.

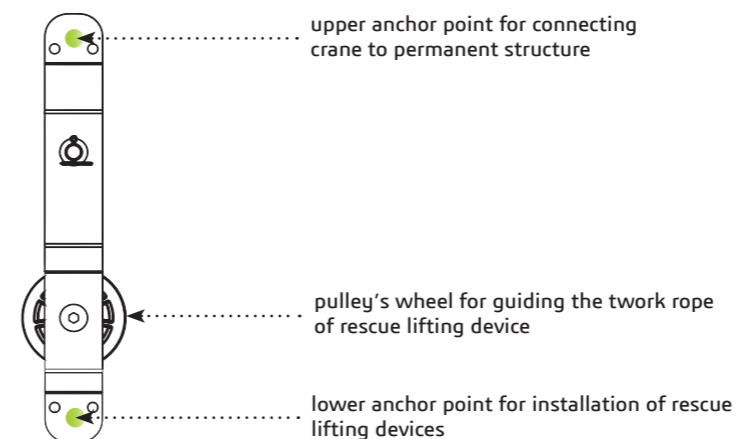


Lower end of leg has a removable foot with rubber pads providing anti-slip protection.

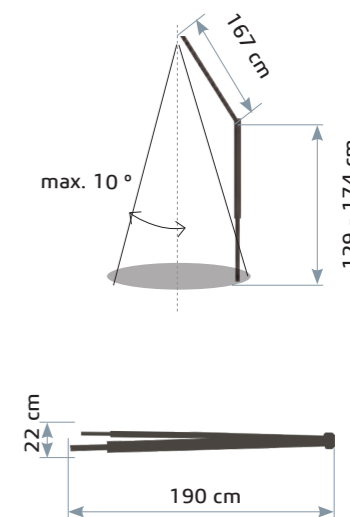


|                                |                  |
|--------------------------------|------------------|
| Height:                        | 71 - 280 cm      |
| Opening diameter under tripod: | -                |
| Leg spacing:                   | -                |
| Device weight:                 | 8 kg             |
| Anchor points on head:         | 2                |
| Lifting and lowering:          | 1 person only    |
| Transport dimensions:          | 190 x 22 x 22 cm |

## HEAD – PLAN VIEW



## DIMENSIONS



### NORM:

EN 795/A:2012  
TS 16415/A:2013



### LIFTING AND LOWERING:



Max.  
2 persons

### DESCRIPTION OF DEVICE:

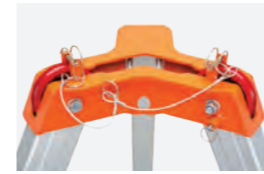
Basic crane TM 1 is a portable, temporary structural anchor point intended to safeguard persons working in sewage manholes, reservoirs, shafts, wells, silos, etc. The device provides protection for up to 2 persons at the same time, and needs to be connected to personal fall protection equipment.

### COMPATIBLE WITH :

RUP 502  
CRW 300



# TM 6



The head is made of powder coated galvanized steel. Equipped with 2 wheels for guiding the work rope on rescue lifting devices. Cotter pins above the wheels protect the rope against accidental slipping during work.



Automatic leg opening locks protect the tripod against accidental collapse during use.



Support bars are made of powder coated galvanized steel. They help stabilize the tripod during work. Each bar is secured with ratchets to prevent it from detaching during work.



The tripod legs are made of strengthened aluminium profiles. Two legs "A" are equipped with a wheel (for guiding the work rope) and anchor point (bore) for mounting winches; the third leg "B" has no wheel or anchor point.



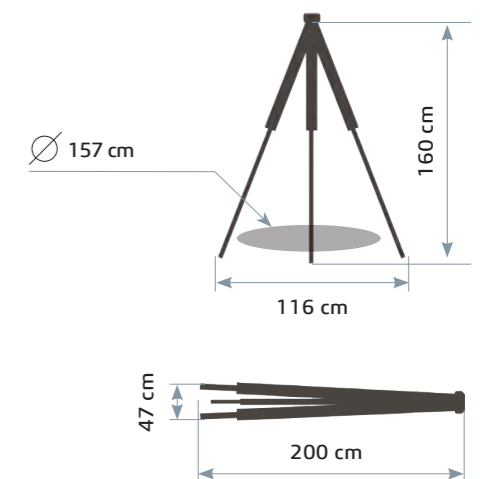
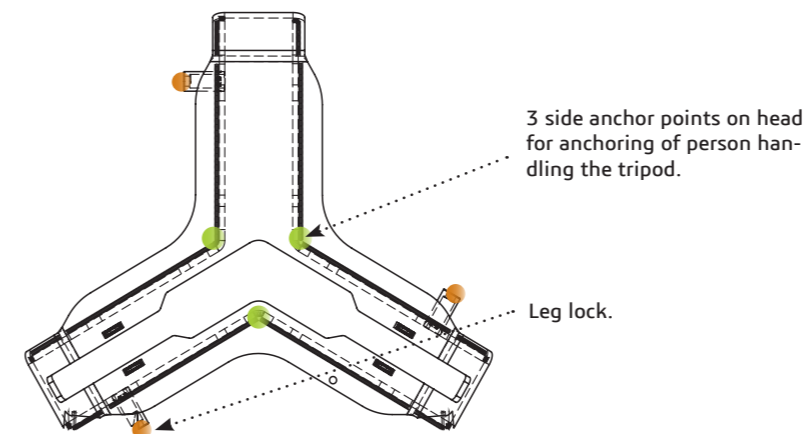
Two legs „A“ are equipped with swivel wheels with brake to provide easier tripod mobility. Wheels are made of aluminium alloy and rubber (wheel) and galvanized steel (housing).



|                                |                   |
|--------------------------------|-------------------|
| Height:                        | 160 cm            |
| Opening diameter under tripod: | 157 cm            |
| Leg spacing:                   | 116 cm            |
| Device weight:                 | 34 kg             |
| Anchor points on head:         | 3                 |
| Lifting and lowering:          | maximum 2 persons |
| Transport dimensions:          | 200 x 47 x 47 cm  |

### HEAD – PLAN VIEW

### DIMENSIONS



### NORM:

EN 795/B:2012  
TS 16415/B:2013



### LIFTING AND LOWERING:



Max.  
2 persons

### DESCRIPTION OF DEVICE:

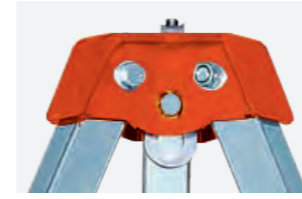
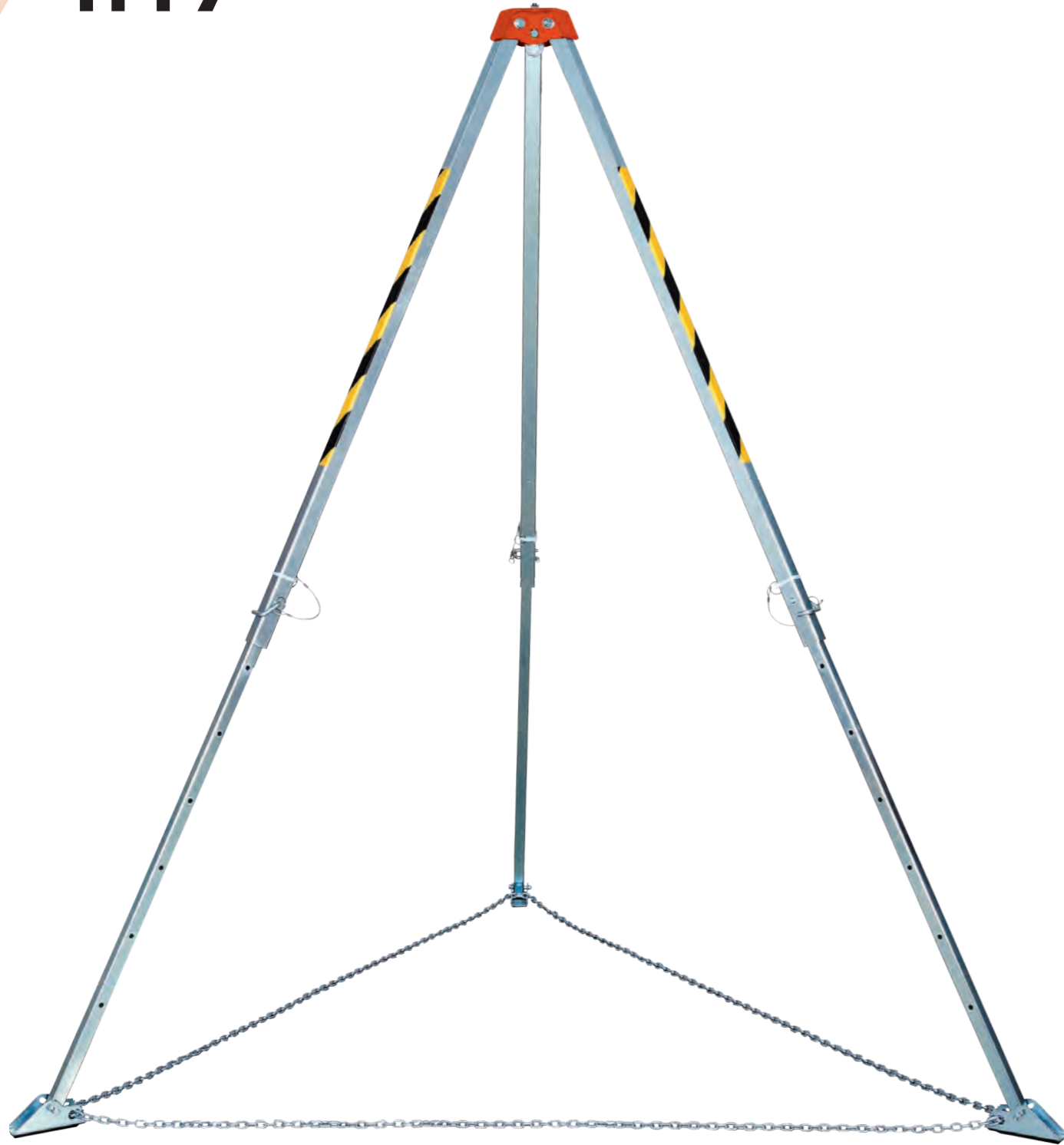
Safety tripod TM 6 is a mobile anchoring device intended for protection of up to 2 persons at the same time. Guide wheels are integrated with the tripod head enabling operation with rescue lifting devices without the need to use any additional pulley.

### COMPATIBLE WITH :

RUP 502-A  
RUP 503  
CRW 200+AT174  
CRW 200+AZ017  
CRW 300+AT172  
CRW 300+AZ017



# TM 7



The head is made of powder coated galvanized steel and has 1 central anchor point eye bolt and 3 additional side anchor points.



Legs are made of hot-dip galvanized steel with 7-step adjustment, locked with cotters.



Tripod legs can be secured with textile webbing or steel chain.



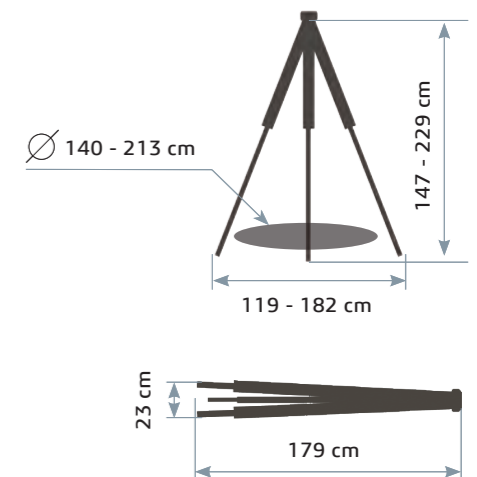
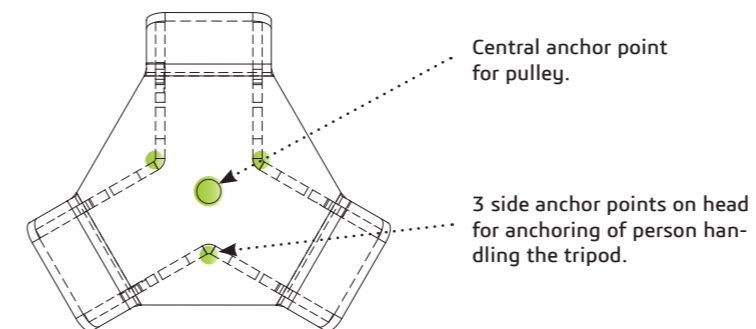
Tripod legs can be secured with textile webbing or steel chain.



|                                |                  |
|--------------------------------|------------------|
| Height:                        | 147 - 229 cm     |
| Opening diameter under tripod: | 140 - 213 cm     |
| Leg spacing:                   | 119 - 182 cm     |
| Device weight:                 | 35 kg            |
| Anchor points on head:         | 4                |
| Lifting and lowering:          | 1 person only    |
| Transport dimensions:          | 179 x 23 x 23 cm |

### HEAD – PLAN VIEW

### DIMENSIONS



### DESCRIPTION OF DEVICE:

Safety tripod TM 7 is a portable anchoring device intended for single person only. The device is made of fully galvanized steel.

### COMPATIBLE WITH :

RUP 502-B  
RUP 503-B  
CRW 200+AZ017  
CRW 300+AZ017

NORM:



EN 795/B:2012

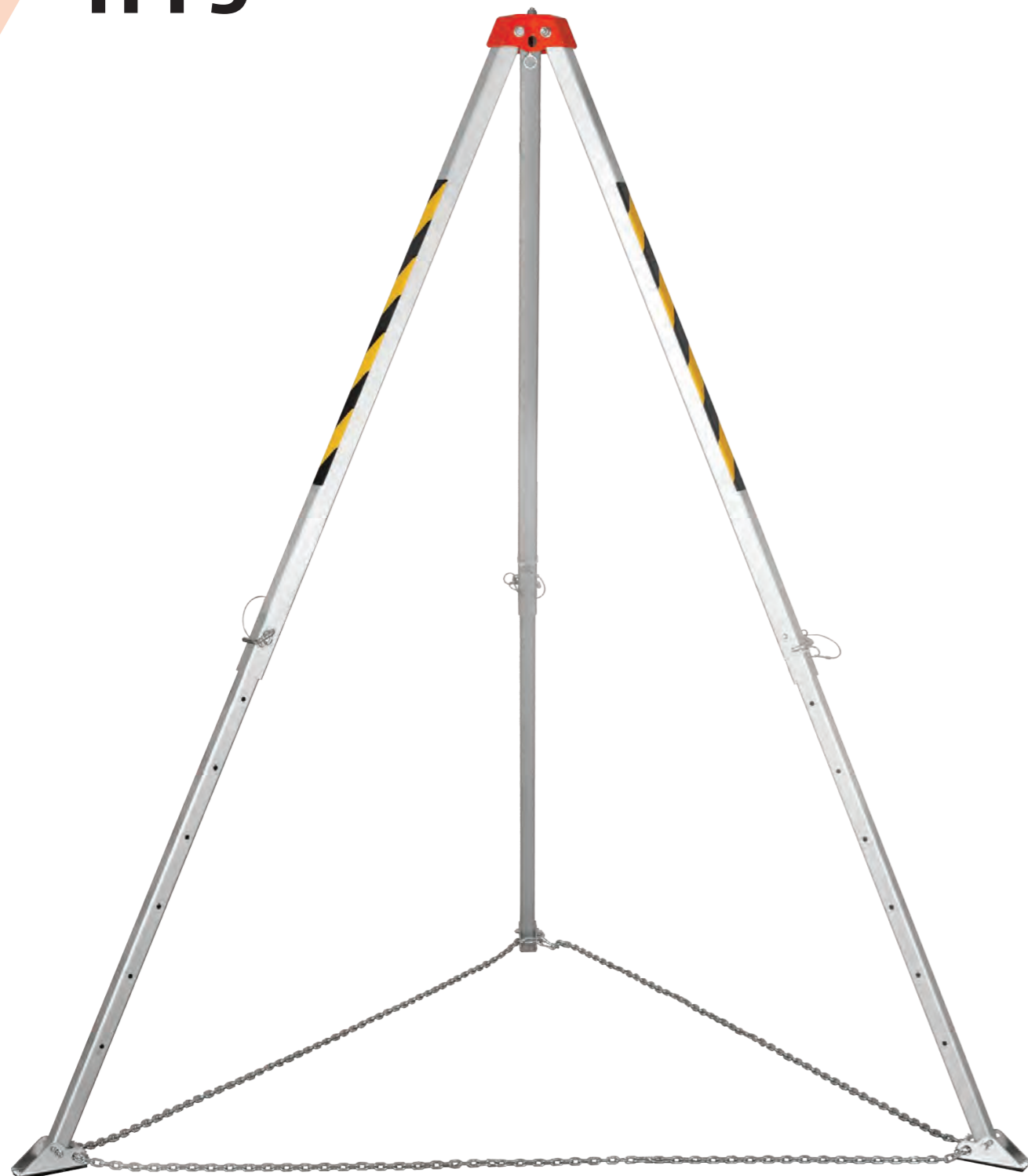
### LIFTING AND LOWERING:



1 person only



# TM 9



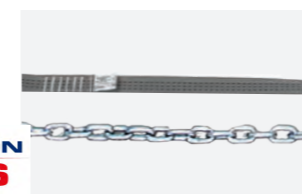
The head is made of powder coated galvanized steel. 1 central anchor point eye bolt and 3 additional side anchor points.



Aluminium legs with 7-step adjustment, locked with cot-ters.



Steel feet have rubber pads for flat surfaces and spiked edges for slippery surfaces.



Tripod legs can be secured with textile webbing or steel chain.

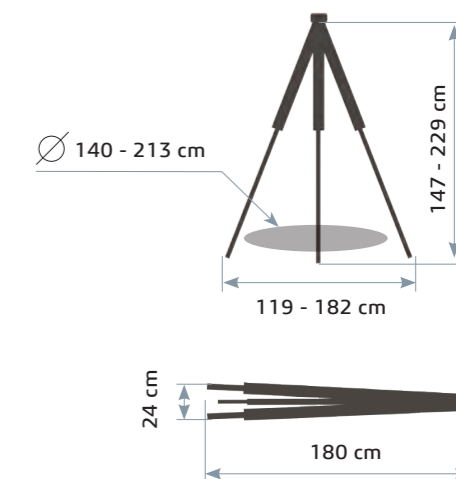
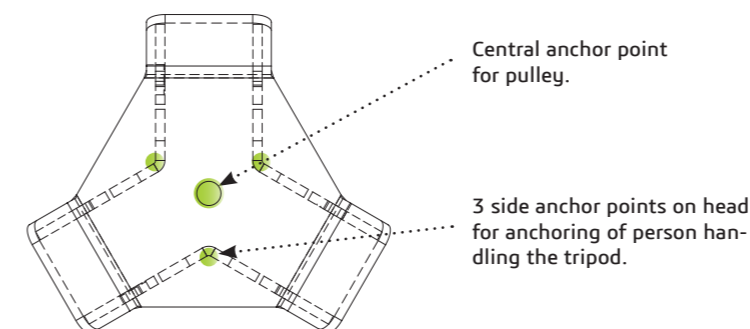


|                                |                  |
|--------------------------------|------------------|
| Height:                        | 147 - 229 cm     |
| Opening diameter under tripod: | 140 - 213 cm     |
| Leg spacing:                   | 119 - 182 cm     |
| Device weight:                 | 17 kg            |
| Anchor points on head:         | 4                |
| Lifting and lowering:          | 1 person only    |
| Transport dimensions:          | 180 x 24 x 24 cm |



### HEAD – PLAN VIEW

### DIMENSIONS



### DESCRIPTION OF DEVICE:

Safety tripod TM 9 is a portable anchoring device intended for single person use only.

### COMPATIBLE WITH :

RUP 502  
CRW 200+AZ017  
CRW 200+AT173  
CRW 300+AZ017  
CRW 300+AT171

NORM:



EN 795/B:2012

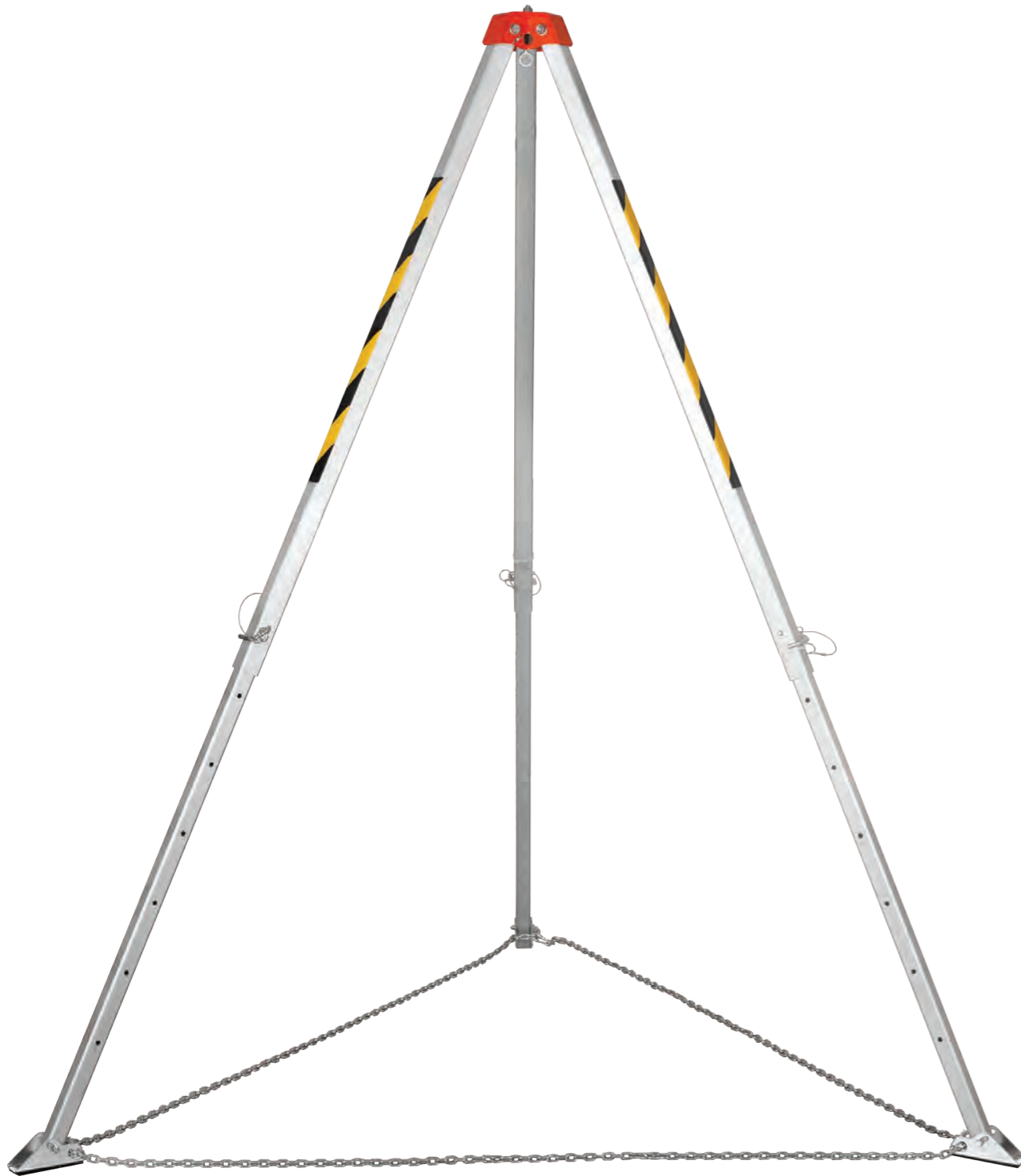
LIFTING AND LOWERING:



1 person only



# TM 9-L



The head is made of powder coated galvanized steel. 1 central anchor point eye bolt and 3 additional side anchor points.



Automatic leg opening locks protect the tripod against accidental collapse during use.



Aluminium legs with 7-step adjustment, locked with cotters.



Steel feet have rubber pads for flat surfaces and spiked edges for slippery surfaces.

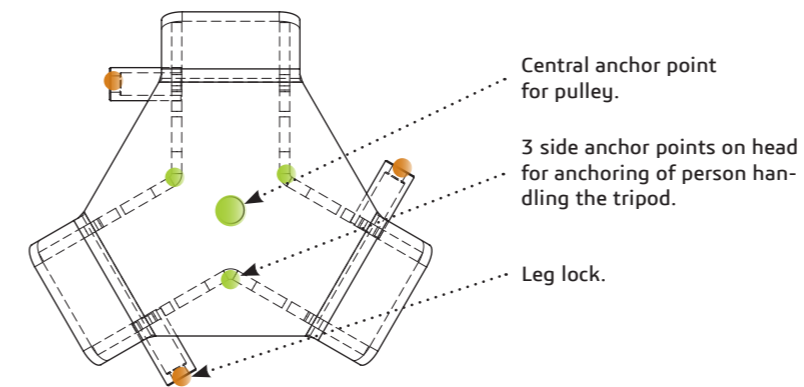


Tripod legs can be secured with textile webbing or steel chain.

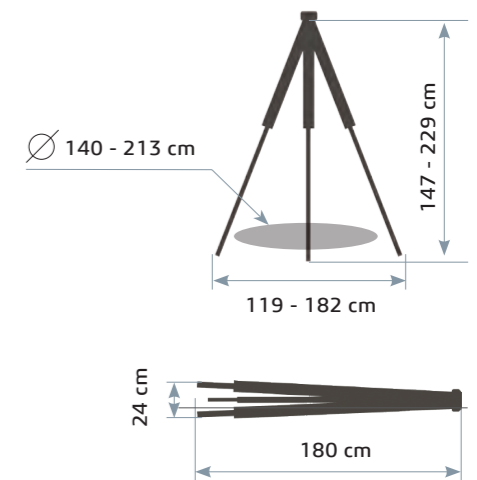


|                                |                  |
|--------------------------------|------------------|
| Height:                        | 147 - 229 cm     |
| Opening diameter under tripod: | 140 - 213 cm     |
| Leg spacing:                   | 119 - 182 cm     |
| Device weight:                 | 17 kg            |
| Anchor points on head:         | 4                |
| Lifting and lowering:          | 1 person only    |
| Transport dimensions:          | 180 x 24 x 24 cm |

### HEAD – PLAN VIEW



### DIMENSIONS



### DESCRIPTION OF DEVICE:

Safety tripod TM 9-L is a portable anchoring device intended for single person use only. The head is equipped with locks for securing the tripod legs against unintended folding.

### COMPATIBLE WITH :

RUP 502  
CRW 200+AZ017  
CRW 200+AT173  
CRW 300+AZ017  
CRW 300+AT171

NORM:



EN 795/B:2012

LIFTING AND LOWERING:

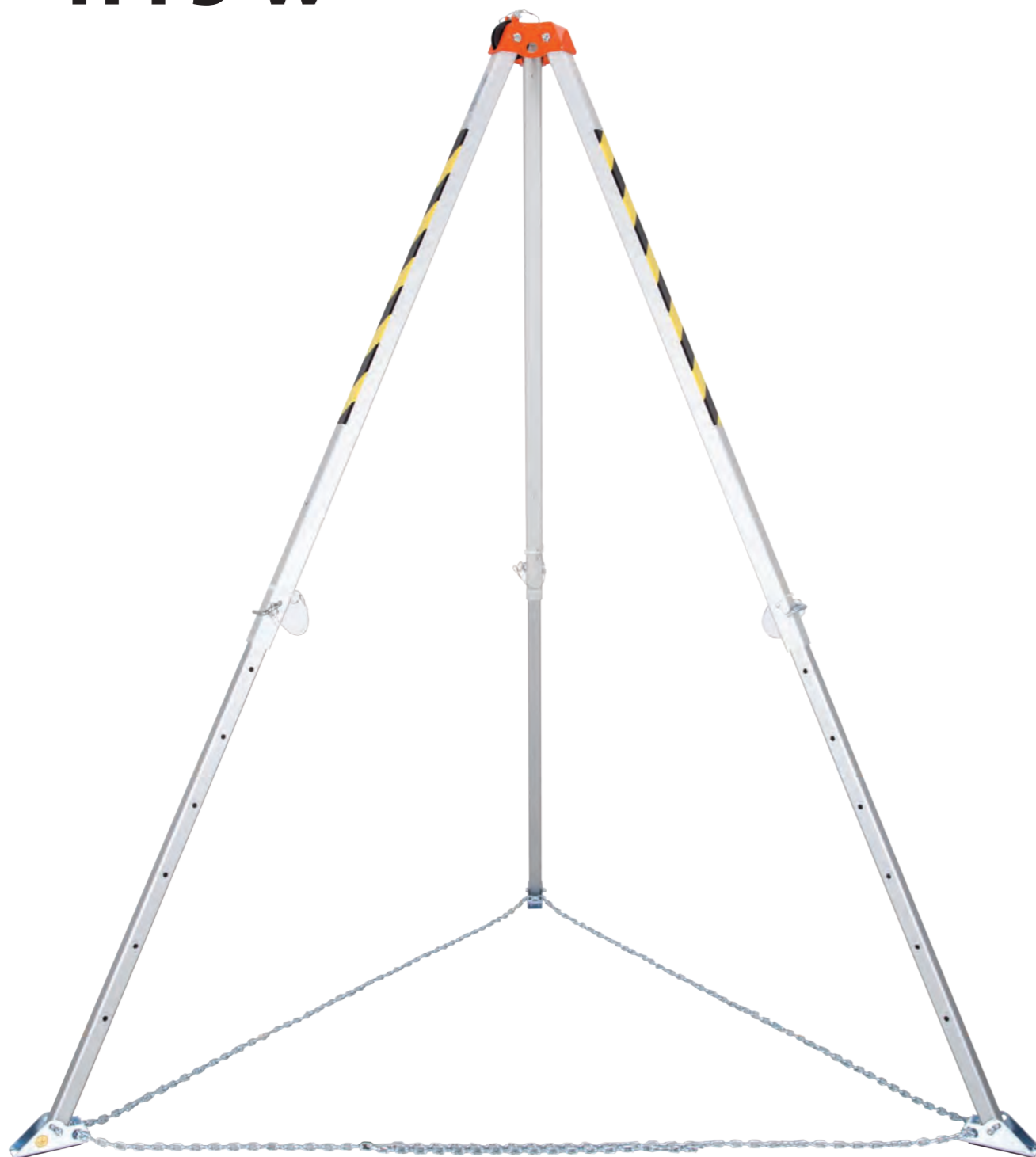


1 person only





# TM 9-W



The head is made of powder coated galvanized steel. A wheel for guiding the work rope on rescue devices. Coters above the wheel prevent the rope from accidental slipping during work.



The tripod legs are made of strengthened aluminium profiles. Leg "A" is equipped with a wheel (for guiding the work rope) and anchor point (bore) for mounting winches; 2 legs "B" have no wheel or anchor point. The legs feature 7-step adjustment.



Steel feet have rubber pads for flat surfaces and spiked edges for slippery surfaces.



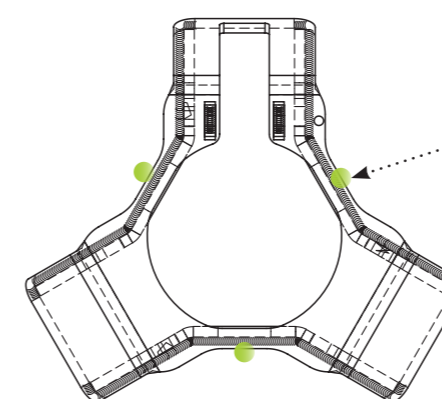
Tripod legs can be secured with textile webbing or steel chain.



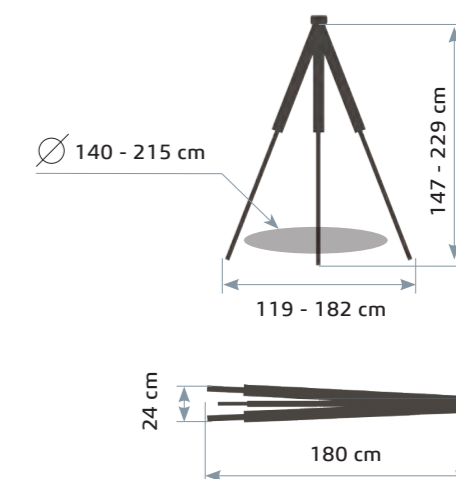
|                                |                  |
|--------------------------------|------------------|
| Height:                        | 147 - 229 cm     |
| Opening diameter under tripod: | 140 - 215 cm     |
| Leg spacing:                   | 119 - 182 cm     |
| Device weight:                 | 17 kg            |
| Anchor points on head:         | 3                |
| Lifting and lowering:          | 1 person only    |
| Transport dimensions:          | 180 x 24 x 24 cm |

## HEAD – PLAN VIEW

## DIMENSIONS



3 side anchor points on head for anchoring of person handling the tripod.



### DESCRIPTION OF DEVICE:

Safety tripod TM 9-W is a portable use anchoring device which does not requires a pulley when operating winches. Intended for single person use only.

### COMPATIBLE WITH :

RUP 502  
CRW 200+AT173  
CRW 300+AT171

NORM:



EN 795/B:2012

### LIFTING AND LOWERING:



1 person only



# TM 13



The head is made of powder coated galvanized steel and has two wheels for guiding the work rope of rescue devices. Cotters above wheels prevent the rope from slipping during work.



The tripod legs are made of strengthened aluminium profiles with 9-step adjustment, locked with cotters. Two legs "A" are equipped with a wheel (for guiding the work rope) and anchor point (bore) for mounting winches; the third leg "B" has no wheel or anchor point.



Aluminium steps are mounted with cotters and provide easier access to the tripod head when extending the legs to their maximum height.



Steel feet have rubber pads for flat surfaces and spiked edges for slippery surfaces.

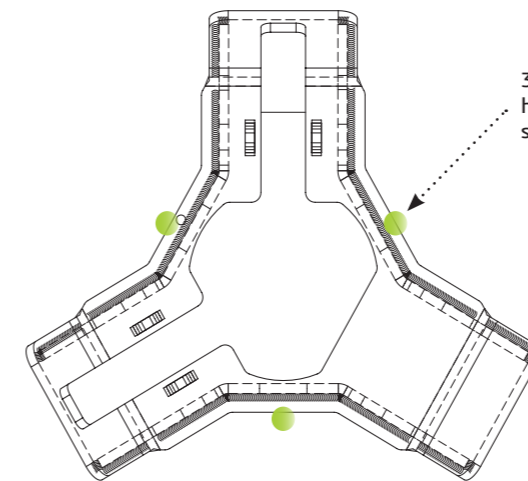


The tripod's legs can be secured with textile webbing or steel chain.



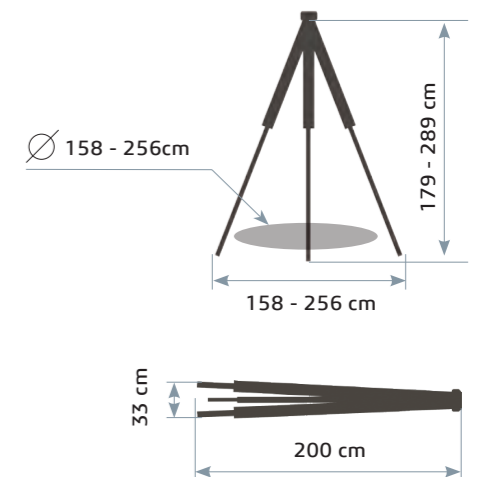
|                                |                  |
|--------------------------------|------------------|
| Height:                        | 179 - 289 cm     |
| Opening diameter under tripod: | 158 - 256 cm     |
| Leg spacing:                   | 147 - 232 cm     |
| Device weight:                 | 37 kg            |
| Anchor points on head:         | 3                |
| Lifting and lowering:          | max. 2 persons   |
| Transport dimensions:          | 200 x 33 x 31 cm |

### HEAD - PLAN VIEW



3 side anchor points on head for anchoring of person handling the tripod.

### DIMENSIONS



### DESCRIPTION OF DEVICE:

Safety tripod TM 13 is a portable anchoring device which does not require pulley when operating winches. Has steps for easier access to the head. The device can be used by 2 persons at the same time.

### COMPATIBLE WITH :

RUP 502-A  
RUP 503  
CRW 200+AT174  
CRW 200+AZ017  
CRW 300+AT172  
CRW 300+AZ017

NORM:



EN 795/B:2012  
TS 16415/B:2013

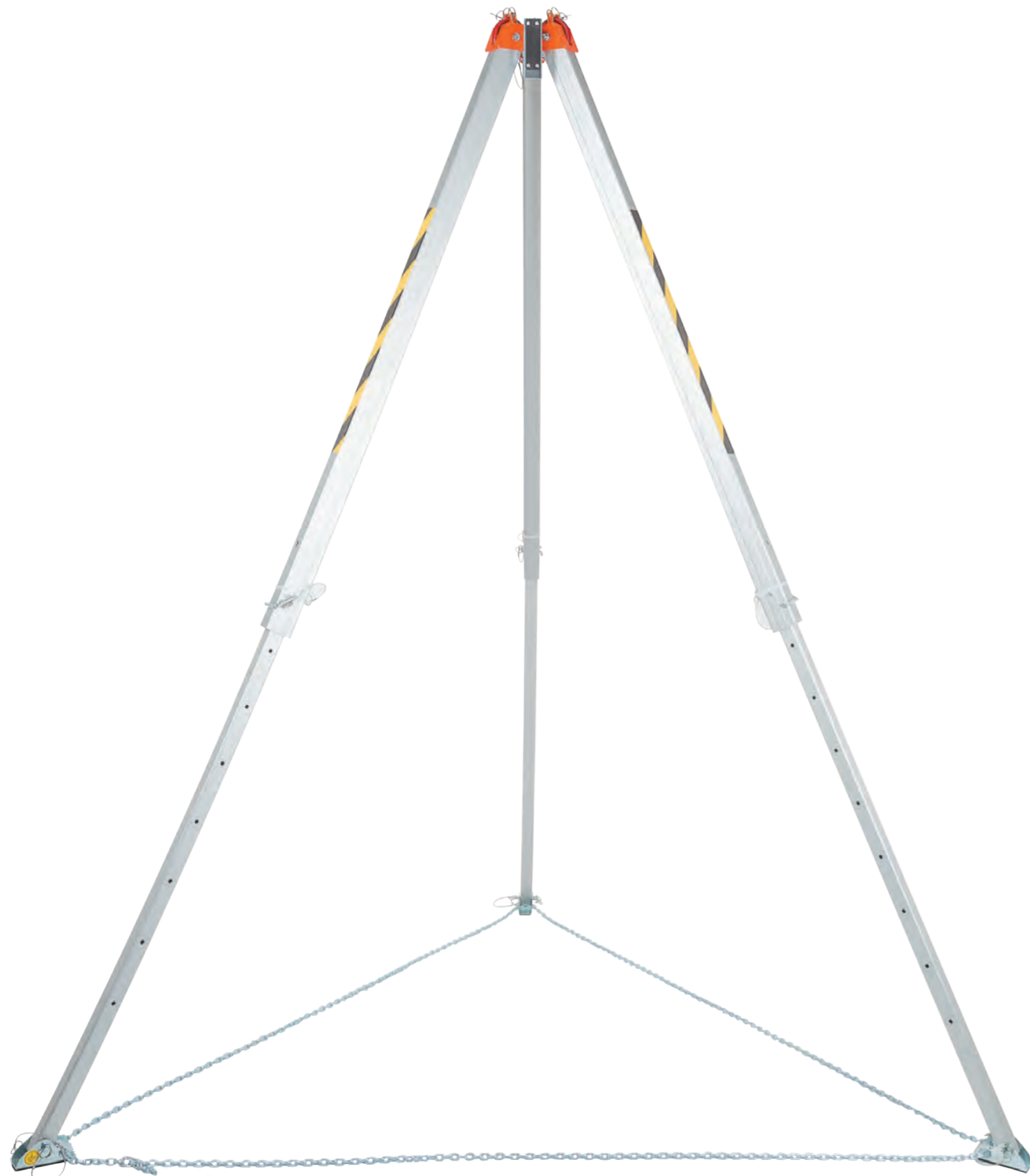
LIFTING AND LOWERING:



Max. 2 persons



# TM 14 - SB



The head is made of powder coated galvanized steel. Two wheels for guiding the work rope rescue devices. Cotter above the wheels prevent the rope from accidental slipping during work.



The tripod legs are made of strengthened aluminium profiles with 9-step adjustment, locked with cotters. Two legs "A" are equipped with a wheel (for guiding the work rope) and anchor point (bore) for mounting winches; the third leg "B" has no wheel or anchor point.



Aluminium steps are mounted with cotters and provide easier access to the tripod head when extending the legs to their maximum height.



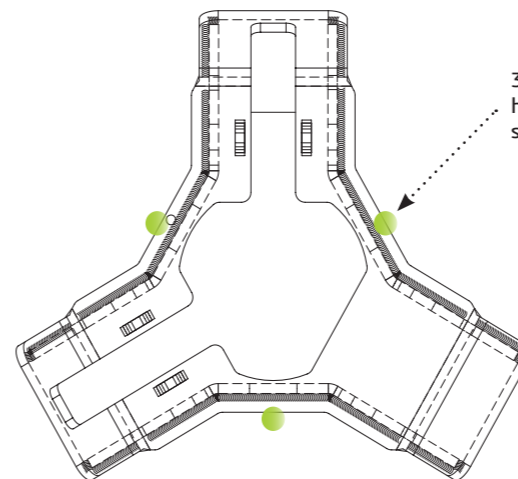
Steel feet have rubber pads for flat surfaces and spiked edges for slippery surfaces.



Tripod legs can be secured with textile webbing or steel chain.

|                                |                  |
|--------------------------------|------------------|
| Height:                        | 179 - 289 cm     |
| Opening diameter under tripod: | 158 - 256 cm     |
| Leg spacing:                   | 147 - 232 cm     |
| Device weight:                 | 38 kg            |
| Anchor points on head:         | 3                |
| Lifting and lowering:          | max. 2 persons   |
| Transport dimensions:          | 228 x 32 x 30 cm |

### HEAD - PLAN VIEW



3 side anchor points on head for anchoring of person handling the tripod.

### EXTENSION KIT FOR TM 14-ZSE



Additional option - kit AT015-150

The kit upgrades tripod TM 14-SB to version TM 14-ZSE

The kit comprises:

- Pulley - 1 pc
- Bracket - 2 pcs
- Head support - 1 pc
- Drive-on plate - 1 pc
- Left bracket base - 1 pc
- Right bracket base - 1 pc
- Chain - 1 pc

### DIMENSIONS

Dimensions are the same as TM 13 tripod (previous page).

### DESCRIPTION OF DEVICE:

TM 14 is a dual-purpose system: standard safety tripod and rescue frame.

### COMPATIBLE WITH :

RUP 502-A  
RUP 503  
CRW 200+AT174  
CRW 300+AT172

NORM:



EN 795/B:2012  
TS 16415/B:2013

LIFTING AND LOWERING:



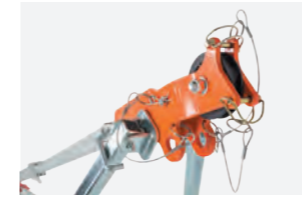
Max. 2 persons



# TM 14 - ZSE



The pulley with 2 anchor points



The pulley is made of powder coated galvanized steel and has a wheel for guiding the winch rope when used as rescue frame. The pulley has an additional anchor point which can be used for e.g. mounting a retractable type fall arrester.



Supports with feet provide stability for arm with pulley at its end. They are made of aluminium and galvanized steel.



In order to improve the strength of the structure, the tripod legs with supports at their ends are secured with a steel chain.

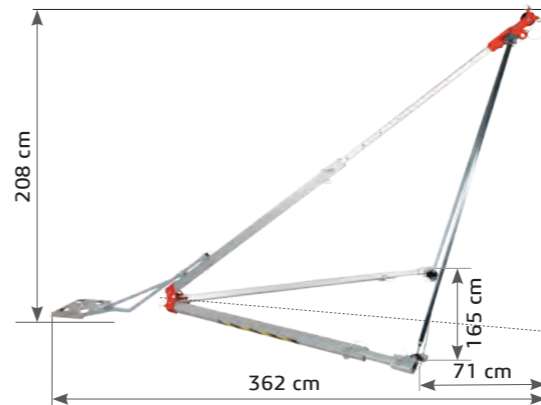


The drive-on plate is made of galvanized and stainless steel and is used for installation of counterweight. Counterweight can be a set of steel plates or a vehicle weighing 3.5 t. The plate can be fixed to the ground by means of mechanical or chemical anchors.



Set of steel plates can be used as counterweight if the tripod cannot be anchored by a vehicle or fixed to the ground. Comprises 19 special plates made of powder coated steel of 25 kg each.

|                       |            |
|-----------------------|------------|
| Height:               | 208 cm     |
| Extension:            | 71 cm      |
| Overall length:       | 362 cm     |
| Leg spacing:          | 165 cm     |
| Weight:               | 65 kg      |
| Lifting and lowering: | max 200 kg |



### DESCRIPTION OF DEVICE:

TM 14 is a dual-purpose system: standard safety tripod and rescue frame.

### COMPATIBLE WITH :

- RUP 502-A
- RUP 503
- CRW 200+AT174
- CRW 300+AT172

NORM:



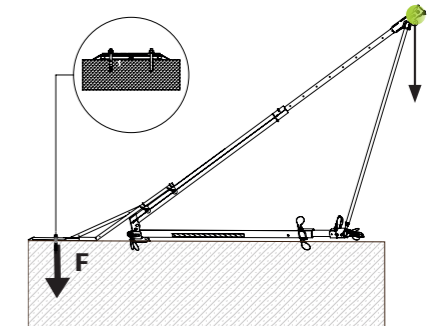
EN 795/E:2012  
TS 16415/E:2013

### LIFTING AND LOWERING:



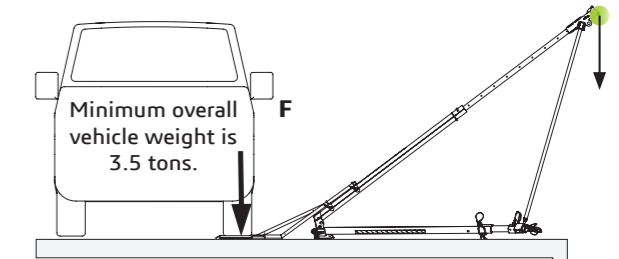
Max. 2 persons

### ANCHORING TO THE GROUND



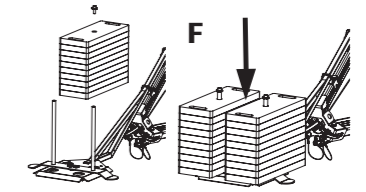
Drive-on plate can be fixed to a concrete or steel surface by means of at least 2 mechanical or chemical anchors with minimum tensile strength of 12 kN.

### VEHICLE AS A COUNTERWEIGHT



Drive-on plate can be loaded by placing a vehicle wheel on the axle at which the motor is installed. Minimum overall vehicle weight is 3.5 tons.

### SET OF STEEL PLATES AS A COUNTERWEIGHT



Drive-on plate can be additionally loaded with special steel counterweight plates of 25 kg each.

### STEEL PLATES SET AT015-600.

- Counterweight plates - 16 pcs
- Set of mounting screws - 1 pc
- Counterweight bracket rods - 2 pcs
- Rods plate - 1 pc



# MATERIAL TRIPODS

|          |    |
|----------|----|
| TM 6-T   | 26 |
| TM 7-T   | 28 |
| TM 9-T   | 30 |
| TM 11-T2 | 32 |
| TM 13-T  | 34 |



# TM 6-T



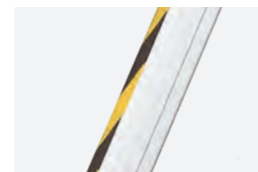
The head is made of powder coated galvanized steel. Equipped with 2 wheels for guiding the work rope of rescue lifting devices. Cotter above wheels provide protection of the rope from accidental slipping during work.



Automatic leg opening locks protect the tripod against accidental collapse during use.



Support bars are made of powder coated galvanized steel. They stabilize the tripod during work. Each bar is secured with ratchets protecting them against being taken out during work.



Tripod legs are made of strengthened aluminium profiles. Two legs "A" – equipped with a wheel (for guiding the work rope) and anchor point (bore) for mounting winches; The third leg "B" is has no wheel or anchor point.

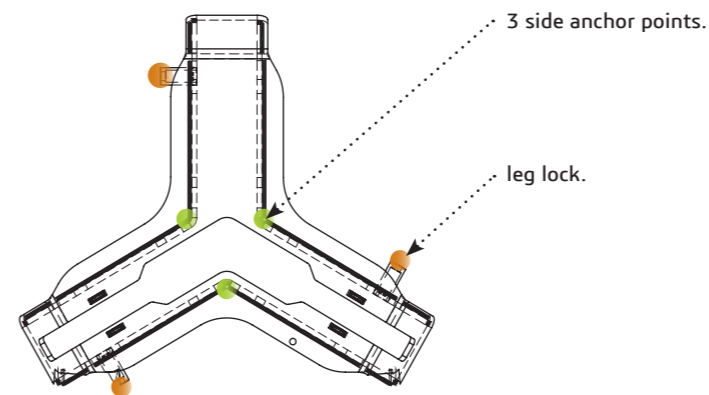


Two legs „A" are equipped with swivel wheels with brake to provide easier tripod mobility. Wheels are made of aluminium alloy and rubber (wheel) and galvanized steel (housing).

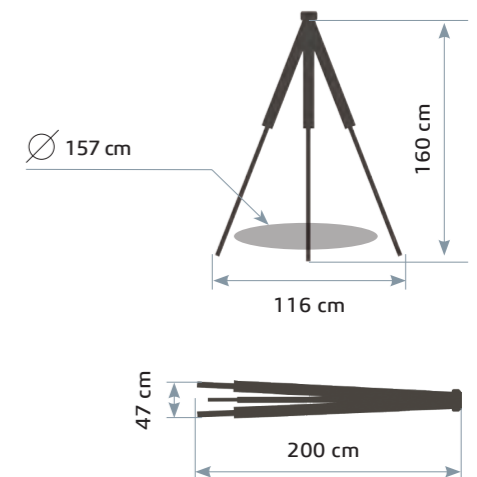


|                                |                  |
|--------------------------------|------------------|
| Height:                        | 160 cm           |
| Opening diameter under tripod: | 157 cm           |
| Leg spacing:                   | 116 cm           |
| Device weight:                 | 34 kg            |
| Anchor points on head:         | 3                |
| Lifting and lowering:          | up to 1000 kg    |
| Transport dimensions:          | 200 x 47 x 47 cm |

### HEAD – PLAN VIEW



### DIMENSIONS



NORM:



LIFTING AND LOWERING:



Capacity of up to 1000 kg

### DESCRIPTION OF DEVICE:

Material tripod TM 6-T is a mobile anchoring device intended for lifting and lowering loads of maximum weight up to 1000 kg. Guiding wheels are integrated with the tripod head enabling operation with rescue lifting devices without the need to use any additional pulley.

### COMPATIBLE WITH :

RUP 502-AT  
RUP 503-T



# TM 7-T



The head is made of powder coated galvanized steel, and has 1 central anchor point as an eye bolt and 3 additional side anchor points.



Above the head, there is an eye for easier tripod handling.



Legs are made of aluminium, and feature 7-step adjustment, locked with a cotter.



Steel feet have rubber pads for flat surfaces and spiked edges for slippery surfaces.



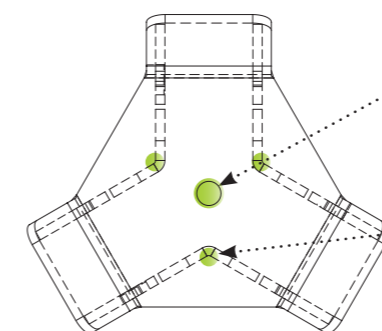
The tripod's legs can be secured with textile webbing or steel chain.



|                                |                  |
|--------------------------------|------------------|
| Height:                        | 147 - 229 cm     |
| Opening diameter under tripod: | 140 - 213 cm     |
| Leg spacing:                   | 119 - 182 cm     |
| Device weight:                 | 35 kg            |
| Anchor points on head:         | 4                |
| Lifting and lowering:          | up to 1000 kg    |
| Transport dimensions:          | 180 x 24 x 24 cm |

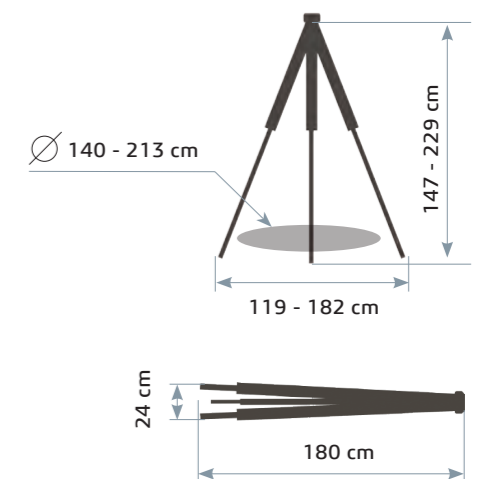
### HEAD - PLAN VIEW

### DIMENSIONS



Central anchor point for pulley.

3 side anchor points on head for anchoring of person handling the tripod.



NORM:



LIFTING AND LOWERING:



Capacity of up to 1000 kg

### DESCRIPTION OF DEVICE:

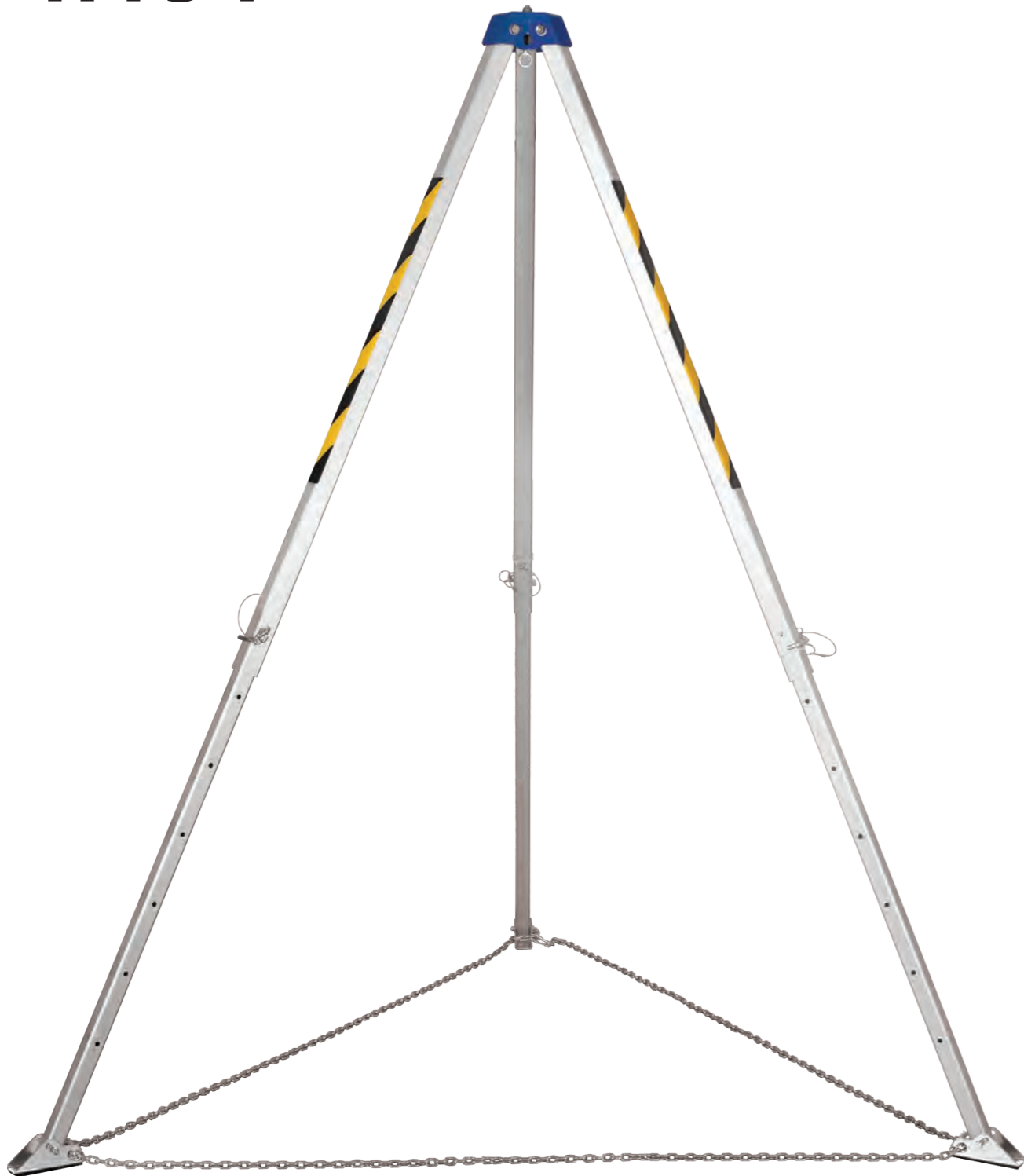
TM 7-T is a steel material tripod intended for lifting/lowering loads of maximum weight of up to 1000 kg.

### COMPATIBLE WITH :

RUP 502-BT  
RUP 503-BT



# TM 9-T



The head is made of powder coated galvanized steel, and has 1 central anchor point as an eye bolt and 3 additional side anchor points.



Legs are made of aluminium, and feature 7-step adjustment, locked with a cotter.



Steel feet have rubber pads for flat surfaces and spiked edges for slippery surfaces.



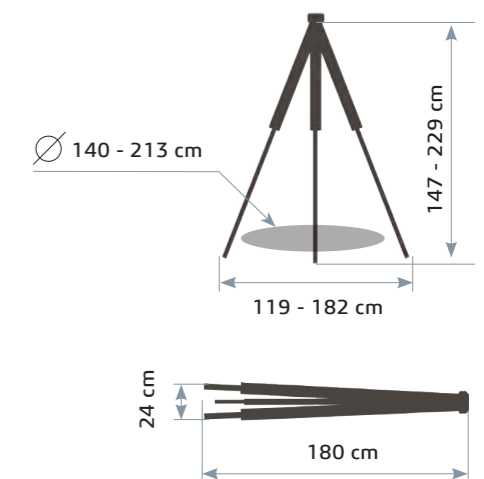
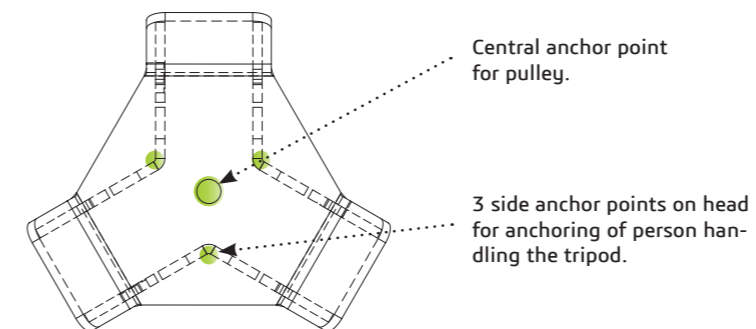
Tripod legs can be secured with textile webbing or steel chain.



|                                |                  |
|--------------------------------|------------------|
| Height:                        | 147 - 229 cm     |
| Opening diameter under tripod: | 140 - 213 cm     |
| Leg spacing:                   | 119 - 182 cm     |
| Device weight:                 | 17 kg            |
| Anchor points on head:         | 4                |
| Lifting and lowering:          | up to 500 kg     |
| Transport dimensions:          | 180 x 24 x 24 cm |

### HEAD – PLAN VIEW

### DIMENSIONS



### DESCRIPTION OF DEVICE:

TM 9-T is a material tripod intended for lifting/lowering loads of maximum weight of up to 500 kg.

### COMPATIBLE WITH :

RUP 502-A  
RUP 503  
CRW 200+AT174  
CRW 300+AT172

NORM:



LIFTING AND LOWERING:

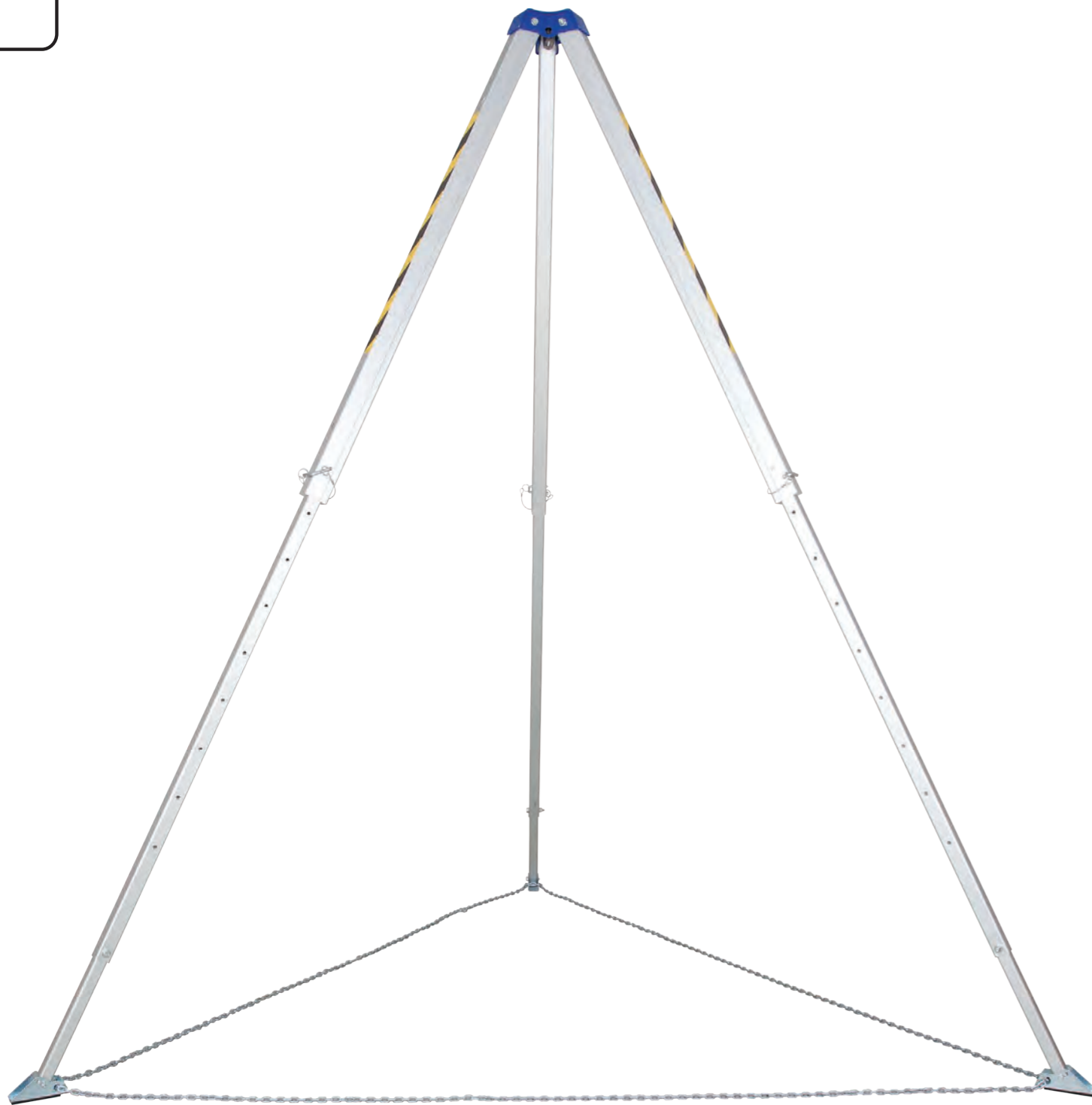


Capacity of up to 500 kg





# TM 11-T2



The head is made of powder coated galvanized steel and has 1 central anchor point as an eye bolt and 3 additional side anchor points.



Legs are made of aluminium, and feature 7-step adjustment, locked with a cotter.



Steel feet have rubber pads for flat surfaces and spiked edges for slippery surfaces.

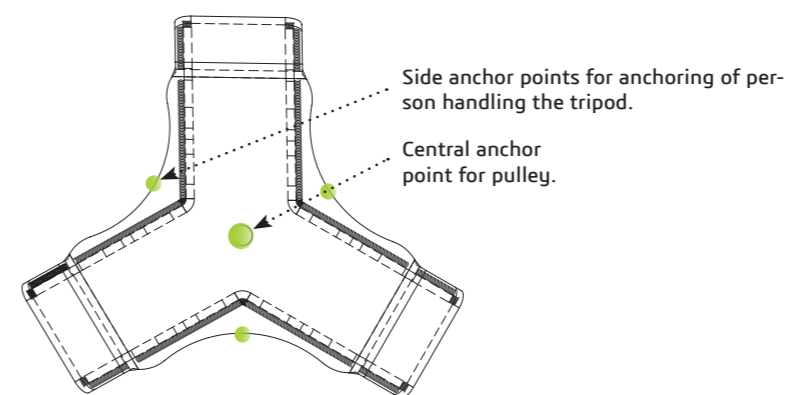


Tripod legs can be secured with textile webbing or steel chain.

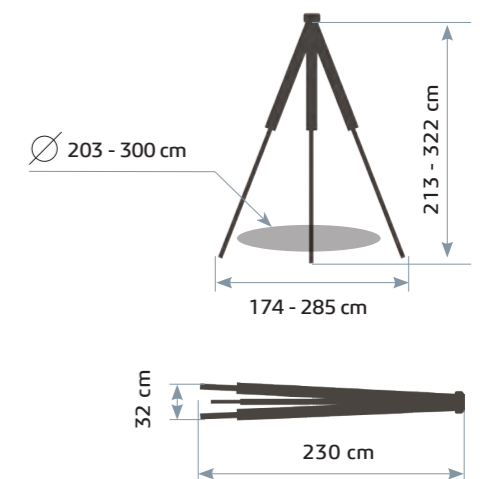


|                                |                  |
|--------------------------------|------------------|
| Height:                        | 213 - 322 cm     |
| Opening diameter under tripod: | 203 - 300 cm     |
| Leg spacing:                   | 174 - 285 cm     |
| Device weight:                 | 45,5 kg          |
| Anchor points on head:         | 4                |
| Lifting and lowering:          | up to 1000 kg    |
| Transport dimensions:          | 230 x 32 x 30 cm |

### HEAD – PLAN VIEW



### DIMENSIONS



### DESCRIPTION OF DEVICE:

TM 11-T2 is a device for material handling, equipped with 4 permanent anchor points with capacity of up to 1000 kg.

### COMPATIBLE WITH :

RUP 502-AT

NORM:



LIFTING AND LOWERING:



Capacity of up to 1000 kg



# TM 13-T



The head is made of powder coated galvanized steel and has two wheels for guiding the work rope on rescue or lifting devices. Cotter above wheels prevent the rope from accidental slipping during work.



Tripod legs are made of strengthened aluminium profiles with 9-step adjustment, locked with cotters. Two legs "A" are equipped with a wheel (for guiding the work rope) and anchor point (bore) for mounting winches the third leg "B" has no wheel or anchor point.



Aluminium steps are mounted with cotters and provide easier access to the tripod head when extending the legs to their maximum height.



Steel feet have rubber pads for flat surfaces and spiked edges for slippery surfaces.

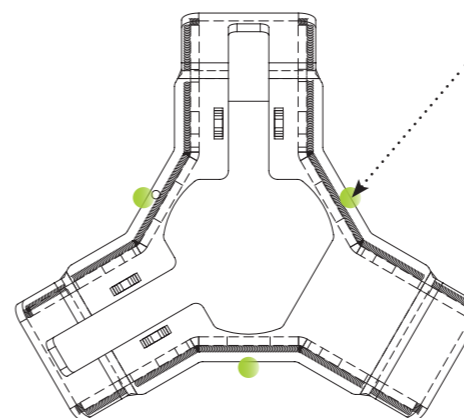


Tripod legs can be secured with textile webbing or steel chain.



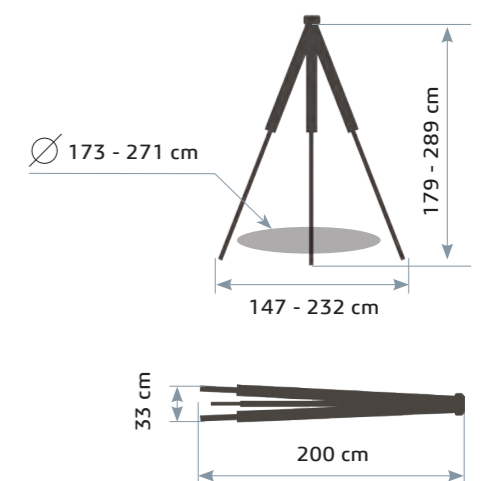
|                                |                  |
|--------------------------------|------------------|
| Height:                        | 179 - 289 cm     |
| Opening diameter under tripod: | 158 - 256 cm     |
| Leg spacing:                   | 147 - 232 cm     |
| Device weight:                 | 37 kg            |
| Anchor points on head:         | 3                |
| Lifting and lowering:          | up to 1000 kg    |
| Transport dimensions:          | 200 x 33 x 31 cm |

### HEAD – PLAN VIEW



Side anchor points for anchoring of person handling the tripod.

### DIMENSIONS



NORM:



LIFTING AND LOWERING:



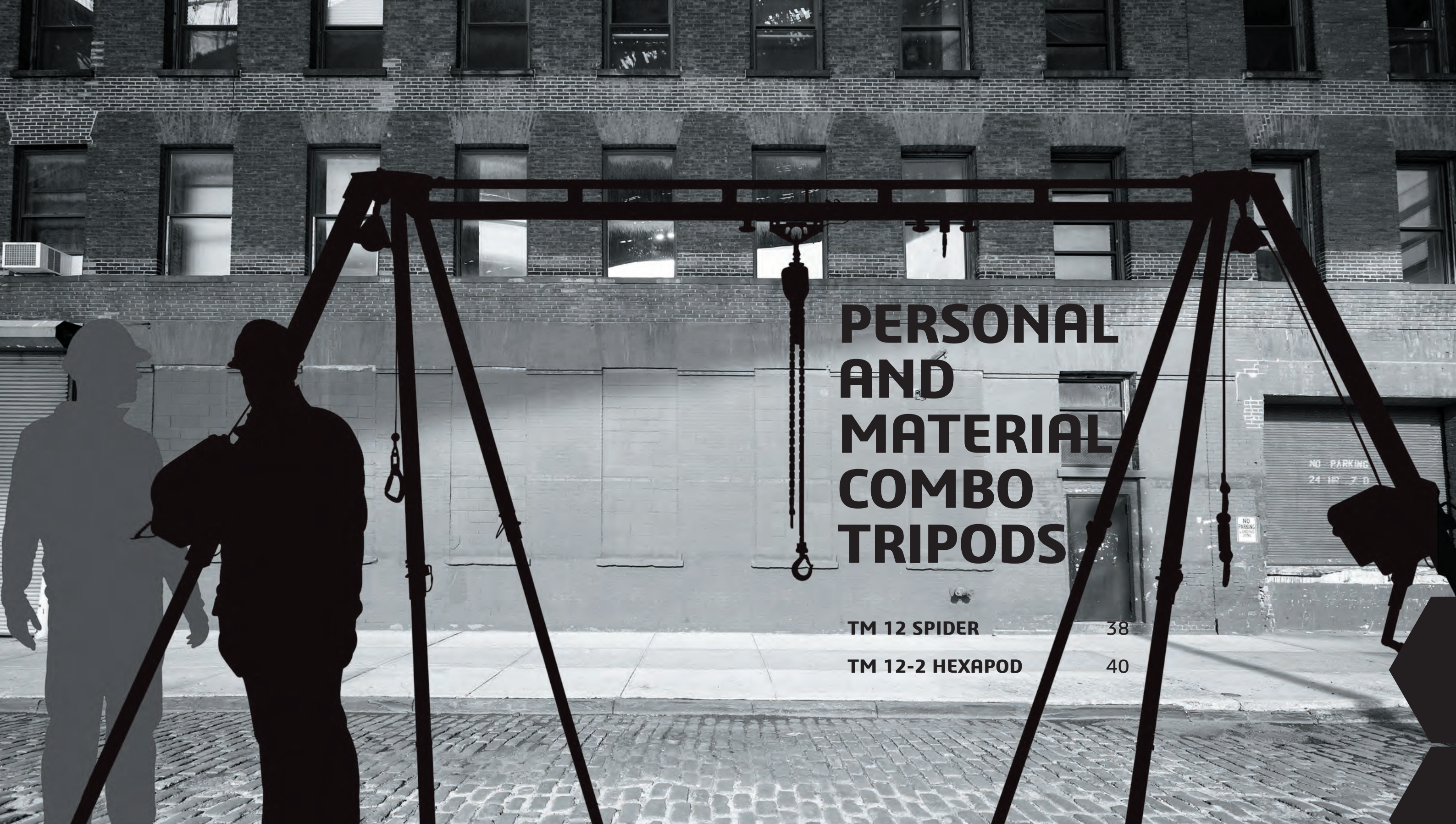
Capacity of up to 1000 kg

### DESCRIPTION OF DEVICE:

TM 13-T is a material handling tripod intended for lifting/lowering loads of maximum weight up to 1000 kg.

### COMPATIBLE WITH :

RUP 502-AT  
RUP 503-T



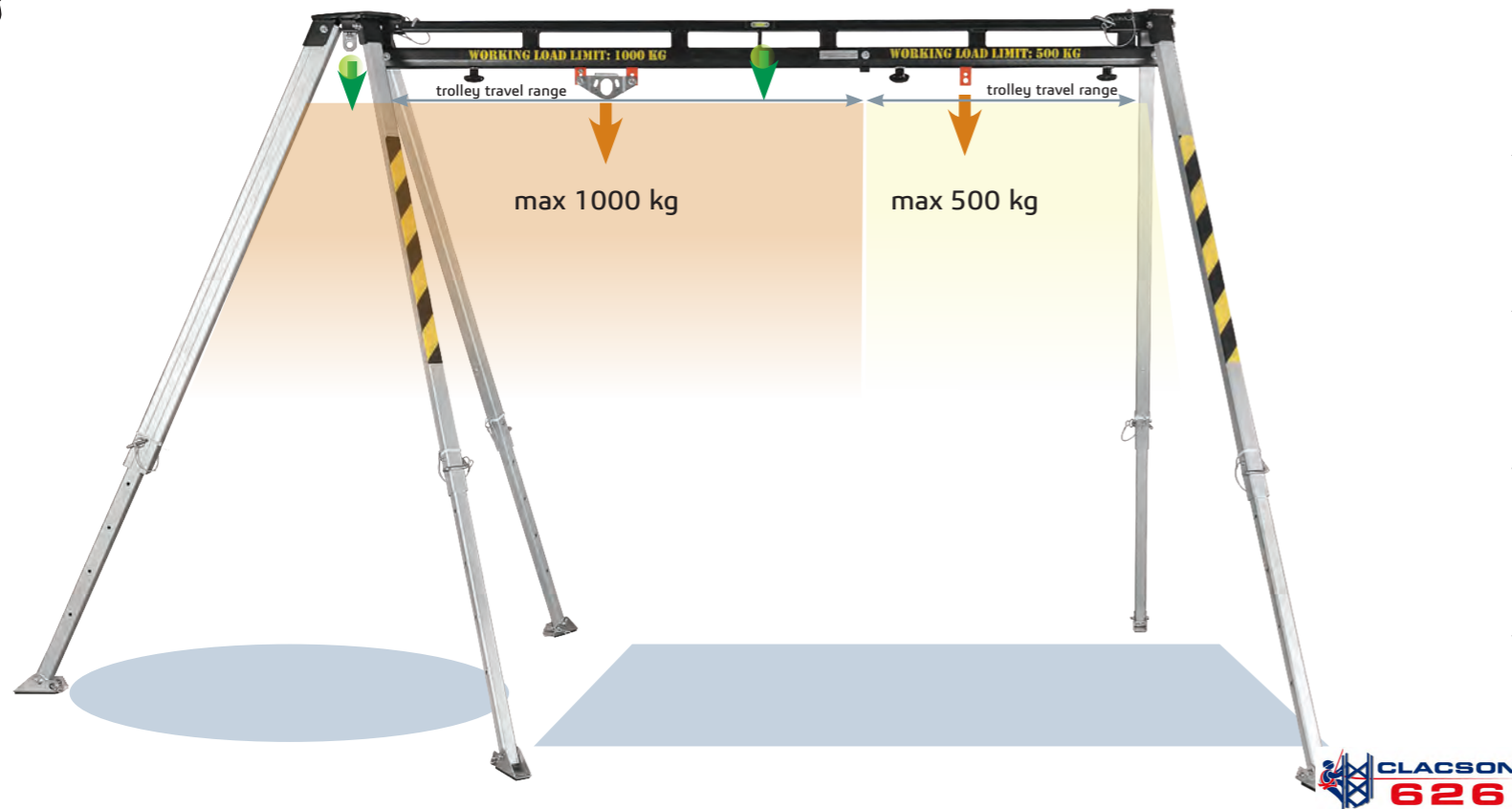
# PERSONAL AND MATERIAL COMBO TRIPODS

TM 12 SPIDER 38

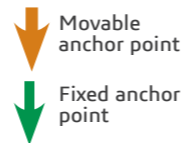
TM 12-2 HEXAPOD 40



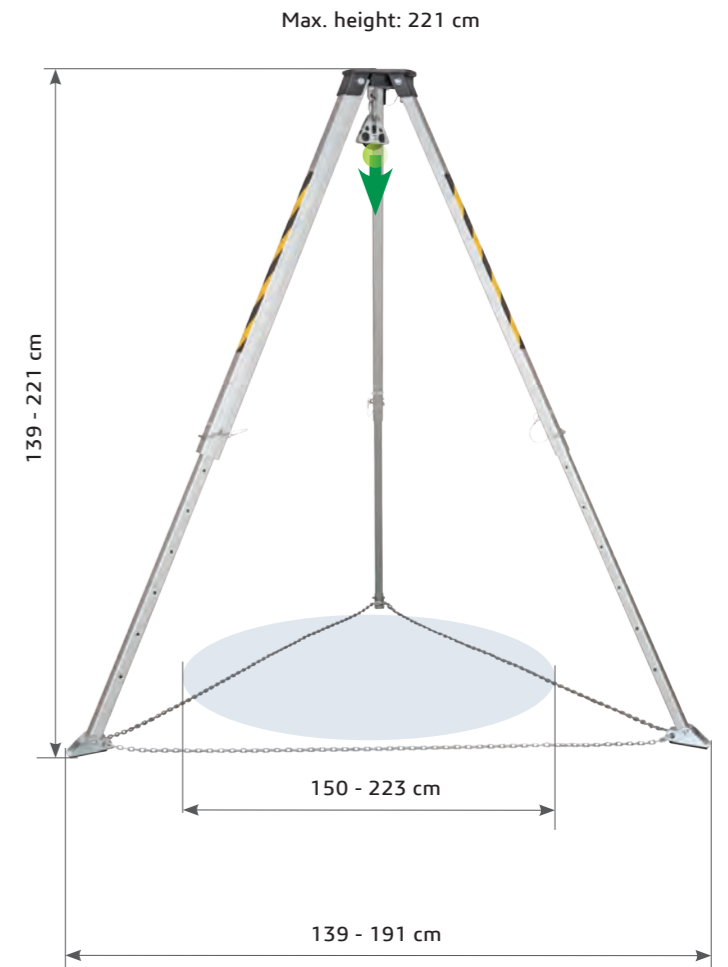
# TM 12 SPIDER



|                                 |                  |
|---------------------------------|------------------|
| Height:                         | 139 - 221 cm     |
| Opening diameter under tripod:  | 150 - 223 cm     |
| Tripod spacing:                 | 139 - 191 cm     |
| Spacing of the complete device: | 325 - 368 cm     |
| Beam weight:                    | 30 kg            |
| Beam length:                    | 230 cm           |
| Device weight:                  | 76 kg            |
| Maximum permissible load:       | 1000 kg          |
| Lift / Lowering for:            | max. 2 persons   |
| Fixed anchor points:            | 4                |
| Movable anchor points:          | 2                |
| Transport dimensions:           | 254 x 33 x 33 cm |



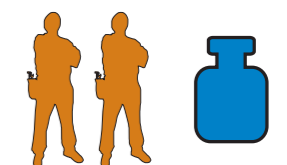
- Steel trolley travelling along the beam is a movable anchor point which can be locked in a fixed position. The point withstands loads of up to 1000 kg or enables lifting/lowering of 1 person.
- Steel trolley travelling along the beam is a movable anchor point which can be locked in a fixed position. The point withstands loads of up to 500 kg.
- The tripod's beam is made of powder coated galvanized steel, and has 2 permanent anchor points for person handling the tripod. The beam is equipped with a level indicating whether the device is set properly.
- The tripod's head is made of powder coated galvanized steel. It is equipped with an attachment point for a pulley and an additional anchor point for attaching of person handling the tripod.
- The tripod's legs are made entirely of aluminium, and feature 7-step adjustment for flexible adaptation of the device's height to desired conditions.
- Anti-slip tripod's foot can be adjusted to slippery surfaces.
- The tripod's legs can be secured with a light textile webbing or a heavier steel chain.



## EXTENDED VARIANT – WORK COMBO TRIPOD

|                                |               |
|--------------------------------|---------------|
| Height:                        | 139 - 221 cm  |
| Opening diameter under tripod: | 150 - 223 cm  |
| Tripod spacing:                | 139 - 191 cm  |
| Device weight:                 | 72 kg         |
| Lift / Descent for:            | max. 1 person |
| Fixed anchor points:           | 2             |
| Maximum permissible load:      | 1000 kg       |

**CE**  
EN 795/B:2012  
TS 16415/B:2013

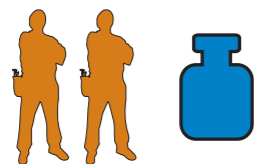


Max. 2 persons or capacity of up to 1000 kg

NORM:

**CE**  
EN 795/B:2012  
TS 16415/B:2013

LIFTING AND LOWERING:



Max. 2 persons or capacity of up to 1000 kg

### DESCRIPTION OF DEVICE:

TM 12 SPIDER is a personnel and material device equipped with 2 movable and 4 fixed anchor points.

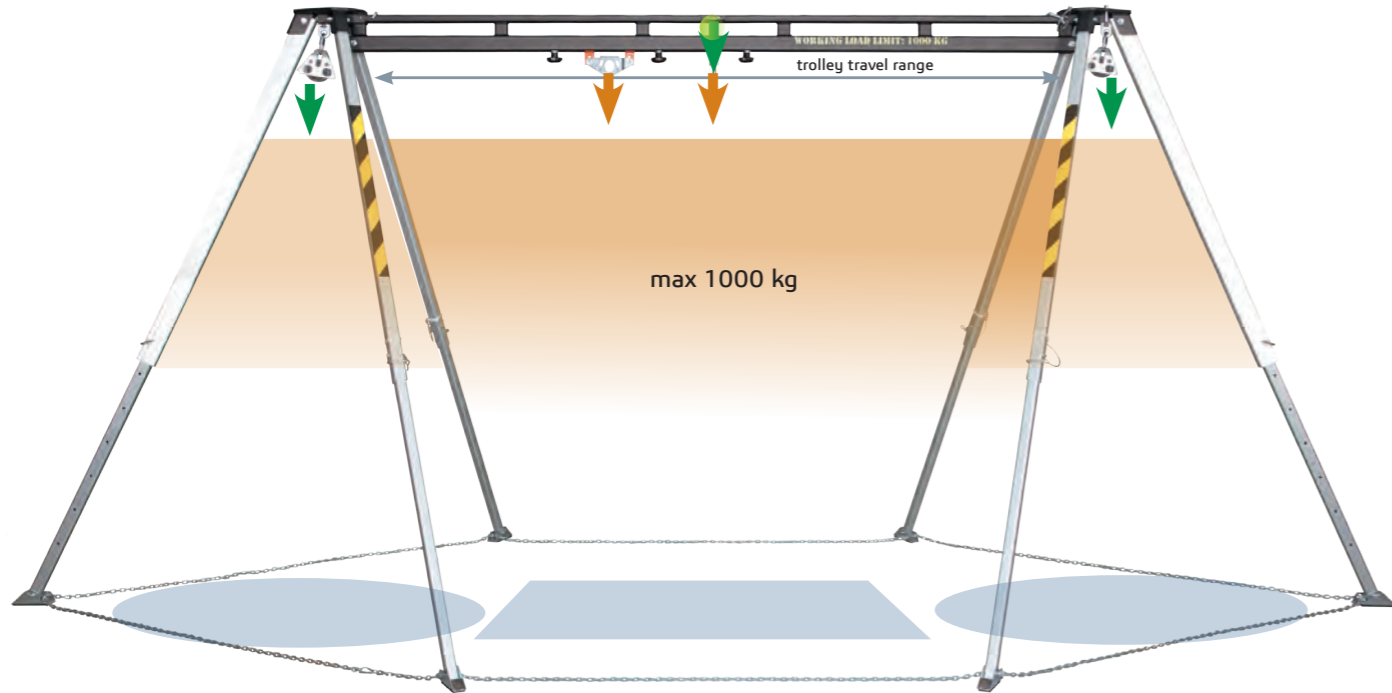
With the system TM 12 Spider it is possible to use the left tripod as an independent work tripod for handling materials or lifting and lowering personnel.

### COMPATIBLE WITH :

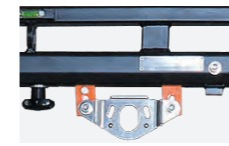
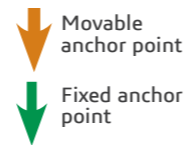
RUP 502-A  
RUP 502-AT  
RUP 503  
RUP503-T  
CRW 200+AT174  
CRW 300+AT172  
CRW 200+AZ017  
CRW 300+AZ017



# TM 12-2 HEXAPOD



|                                 |                  |
|---------------------------------|------------------|
| Height:                         | 139 - 221 cm     |
| Opening diameter under tripods: | 150 - 223 cm     |
| Tripod spacing:                 | 139 - 191 cm     |
| Spacing of complete device:     | 464 - 537 cm     |
| Beam weight:                    | 34 kg            |
| Beam length:                    | 280 cm           |
| Device weight:                  | 90 kg            |
| Fixed anchor points:            | 6                |
| Maximum permissible load:       | 1000 kg          |
| Lift / Descent for:             | max. 2 persons   |
| Movable anchor points:          | 2                |
| Transport dimensions:           | 254 x 33 x 33 cm |



Steel trolley travelling along the beam is a movable anchor point which can be locked in a fixed position. The point withstands loads of up to 1000 kg or enables lifting/lowering of 1 person.



Steel trolley travelling along the beam is a movable anchor point which can be locked in a fixed position. The point withstands loads of up to 500 kg.



The tripod's beam is made of powder coated galvanized steel, and has 2 permanent anchor points for a person handling the tripod. The beam is equipped with a level indicating whether the device is set properly.



The tripod's head is made of powder coated galvanized steel. It is equipped with an attachment point for a pulley and an additional anchor point for attaching of person handling the tripod.



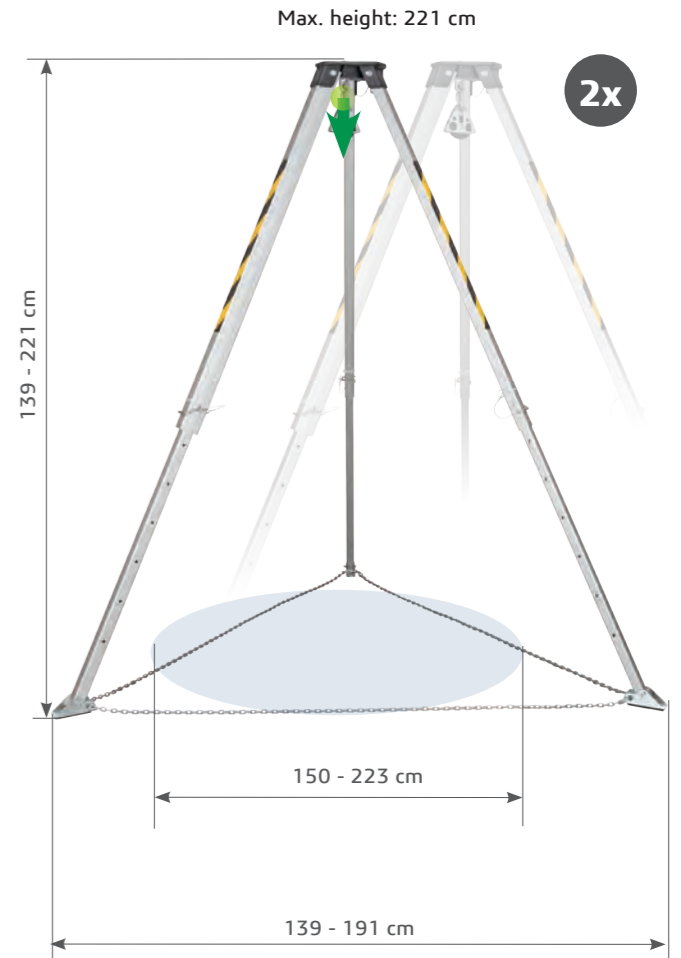
The tripod's legs are made entirely of aluminium, and feature 7-step adjustment for flexible adaptation of the device's height to desired conditions.



Anti-slip tripod's foot can be adjusted to slippery surfaces.



The tripod's legs can be secured with a light textile webbing or a heavier steel chain.



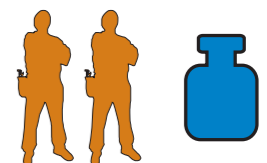
With the system TM 12-2 Hexapod it is possible to use side tripods as independent work tripods for handling materials or lifting and lowering personnel

## EXTENDED VARIANT – WORK COMBO TRIPOD

|                                |               |
|--------------------------------|---------------|
| Height:                        | 139 - 221 cm  |
| Opening diameter under tripod: | 150 - 223 cm  |
| Tripod spacing:                | 139 - 191 cm  |
| Device weight:                 | 86 kg         |
| Lift / Descent for:            | max. 1 person |
| Fixed anchor points:           | 2             |
| Maximum permissible load:      | 1000 kg       |



EN 795/B:2012  
TS 16415/B:2013



Max. 2 persons or capacity of up to 1000 kg

NORM:

LIFTING AND LOWERING:

DESCRIPTION OF DEVICE:

TM 12-2 HEXAPOD is a personnel and material device equipped with 2 movable and 6 fixed anchor points.

COMPATIBLE WITH :

RUP 502-A  
RUP 502-AT  
RUP 503  
RUP503-T  
CRW 200+AT174  
CRW 300+AT172  
CRW 200+AZ017  
CRW 300+AZ017



EN 795/B:2012  
TS 16415/B:2013



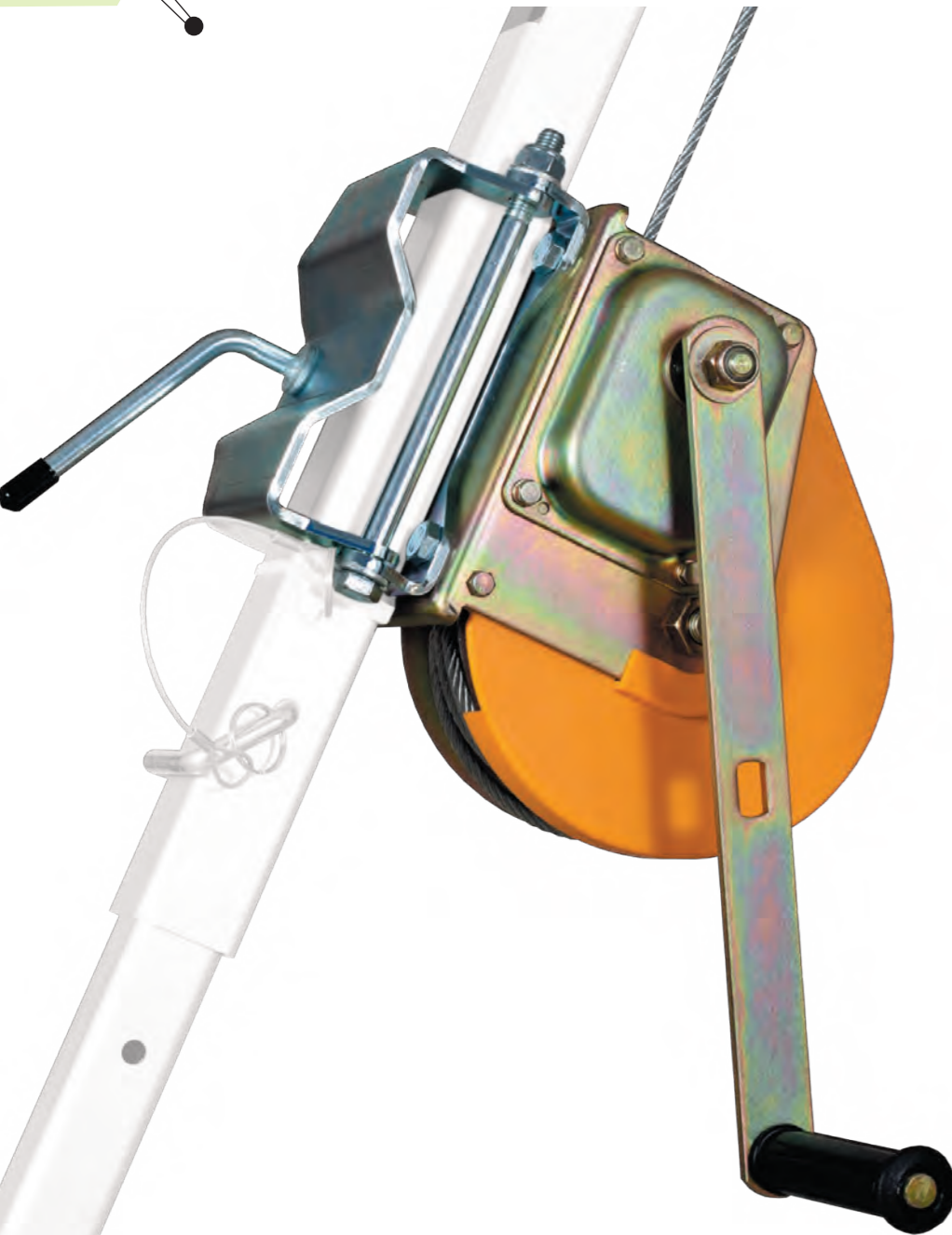
Max. 2 persons or capacity of up to 1000 kg

# RESCUE DEVICES & LIFTING DEVICES

|                                |    |
|--------------------------------|----|
| RUP 502                        | 44 |
| RUP 502-A                      | 46 |
| RUP 502-B                      | 48 |
| RUP 503                        | 50 |
| RUP 503-B                      | 52 |
| RUP 505                        | 54 |
| RUP 505-A                      | 56 |
| CRW 200                        | 58 |
| CRW 300                        | 60 |
| RUP 502-T                      | 62 |
| RUP 502-AT                     | 64 |
| RUP 502-BT                     | 66 |
| RUP 503-T                      | 68 |
| RUP 503-BT                     | 70 |
| PULLEYS PL 101, TU 415, TU 416 | 72 |



# RESCUE LIFTING DEVICE RUP 502



RUP 502 is a winch equipped with a clamp for mounting on tripod leg. The winch is equipped with six-strand steel cable with natural fibre kern of 20 and 25 m in length and 6.3 mm in diameter;

RUP 502 is a component of rescue equipment. The device, can be lifted from a lower level onto a higher level or vice-versa. The descent distance cannot be more than 2 m.

With the ratio used in the mechanism it is possible to make one turn of the drum per 5 turns of the winch's crank.

The crank arm is available in 2 lengths which, depending of the variant chosen, enable torque adjustment.

The RUP 502 rescue device complies with EN 1496/B.



**Accessories:**

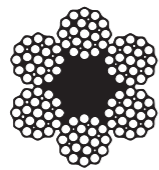
Spring-type energy absorber SDW

Pulley PL 101

**CABLE LENGTH VARIANTS:**

- 20 m
- 25 m

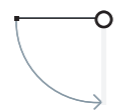
**CABLE PARAMETERS:**



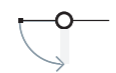
6x19+NFC

∅ 6,3 mm

**OVERALL MECHANISM RATIO:**



Variant 1  
1 : 25



Variant 2  
1 : 12

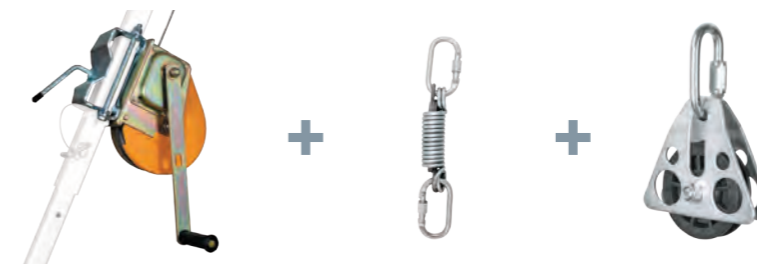
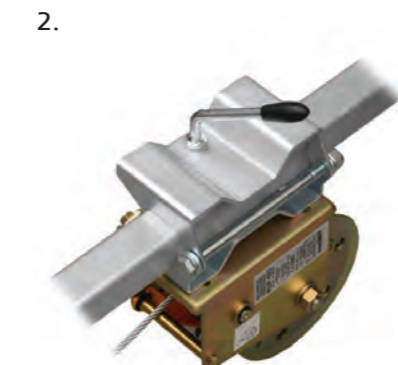
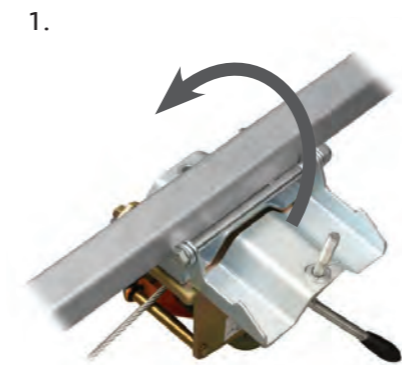
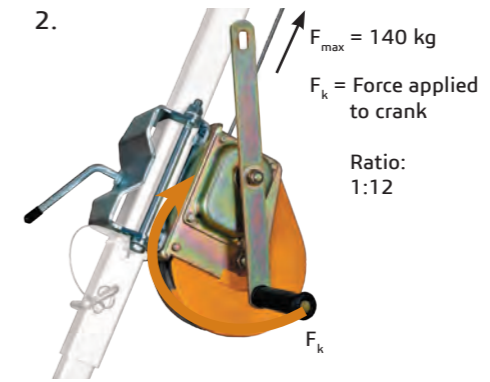
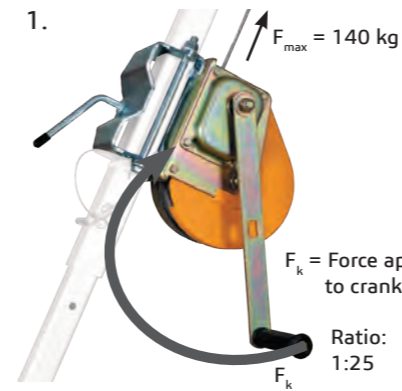
**SPUR GEARING:**



1 : 5

**COMPATIBLE WITH :**

TM 9  
TM 9-L  
TM 9-W



**MAIN FEATURES:**

|   |                   |
|---|-------------------|
| Winch weight:                               | 13 kg, 14 kg      |
| Available cable variants:                   | 20 m, 25 m        |
| Cable diameter:                             | 6,3 mm            |
| Cable type:                                 | 6x19 + NFC        |
| Mechanism ratio:                            | 1 : 5             |
| Force applied to lift 140 kg for variant 1: | 5,6 kG            |
| Force applied to lift 140 kg for variant 2: | 11,6 kG           |
| Permissible work load:                      | 140 kg            |
| Compatible with tripod types:               | TM9, TM9-L, TM9-W |
| Standard:                                   | EN 1496/B         |

**LOADS:**

**Variant 1:**

At load weight (Fmax) of 140 kg force applied to the crank (Fk) shall be 5.6 kG.

**Variant 2:**

At load weight (Fmax) of 140 kg force applied to the crank (Fk) shall be 11.6 kG.

**ASSEMBLY:**

Simple mounting of the winch on the tripod leg by means of a clamp:

1. Clamp opened;
2. Clamp closed.

**KIT:**

Rescue winch RUP 502 is offered with pulley PL 101 and spring-type energy absorber SDW.



EN 1496/B



1 person at max. 140 kg



# RESCUE LIFTING DEVICE RUP 502-A



RUP 502-A is a winch equipped with a clamp for mounting on tripod leg. The winch is equipped with six-strand steel cable with natural fibre kern of 20 and 25 m in length and 6.3 mm in diameter;

RUP 502-A is a component of rescue equipment. The device, can be lifted from a lower level onto a higher level or vice-versa. The descent distance cannot be more than 2 m.

With the ratio used in the mechanism it is possible to make one turn of the drum per 5 turns of the winch's crank.

The crank arm is available in 2 lengths which, depending of the variant chosen, enable torque adjustment.

The RUP 502-A rescue device complies with EN 1496/B.

### Accessories:

Spring-type energy absorber SDW

### CABLE LENGTH VARIANTS:

- 20 m
- 25 m

### CABLE PARAMETERS:

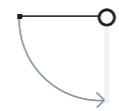


6x19+NFC

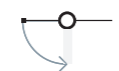


ø 6,3 mm

### OVERALL MECHANISM RATIO:



Variant 1  
1 : 25



Variant 2  
1 : 12

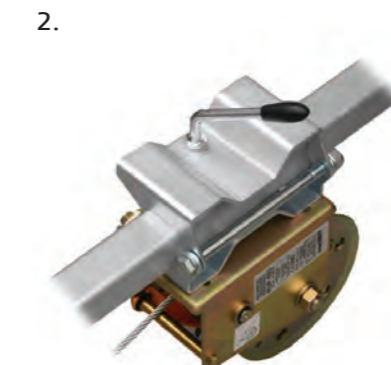
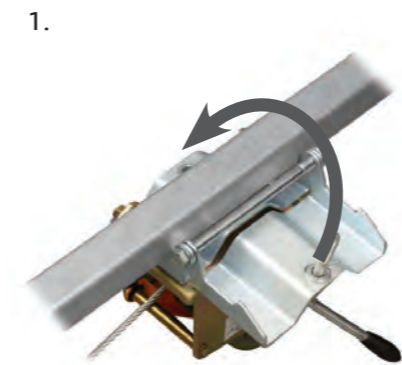
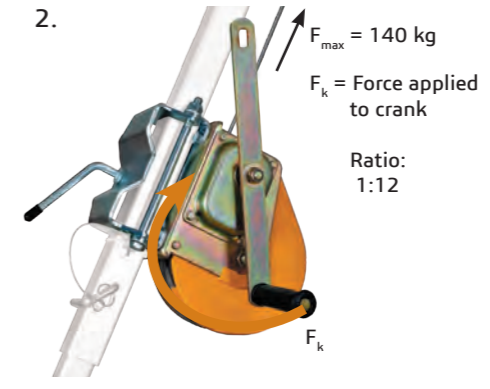
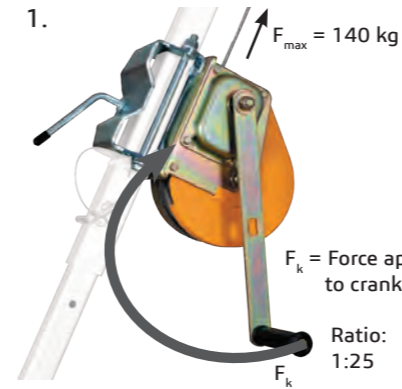
### SPUR GEARING:



1 : 5

### COMPATIBLE WITH :

TM 6  
TM 12  
TM 12-2  
TM 13



### LOADS:

#### Variant 1:

At load weight (Fmax) of 140 kg force applied to the crank (Fk) shall be 5.6 kG.

#### Variant 2:

At load weight (Fmax) of 140 kg force applied to the crank (Fk) shall be 11.6 kG.

### ASSEMBLY:

Simple mounting of the winch on the tripod leg by means of a clamp:

1. Clamp opened;
2. Clamp closed.

### KIT:

Rescue winch RUP 502-A is offered with spring-type energy absorber SDW.

### MAIN FEATURES:

|   |                         |
|---|-------------------------|
| Winch weight:                               | 13 kg, 14 kg            |
| Available cable variants:                   | 20 m, 25 m              |
| Cable diameter:                             | 6,3 mm                  |
| Cable type:                                 | 6x19 + NFC              |
| Mechanism ratio:                            | 1 : 5                   |
| Force applied to lift 140 kg for variant 1: | 5,6 kG                  |
| Force applied to lift 140 kg for variant 2: | 11,6 kG                 |
| Permissible work load:                      | 140 kg                  |
| Compatible with tripod types:               | TM6, TM13, TM12, TM12-2 |
| Standard:                                   | EN 1496/B               |



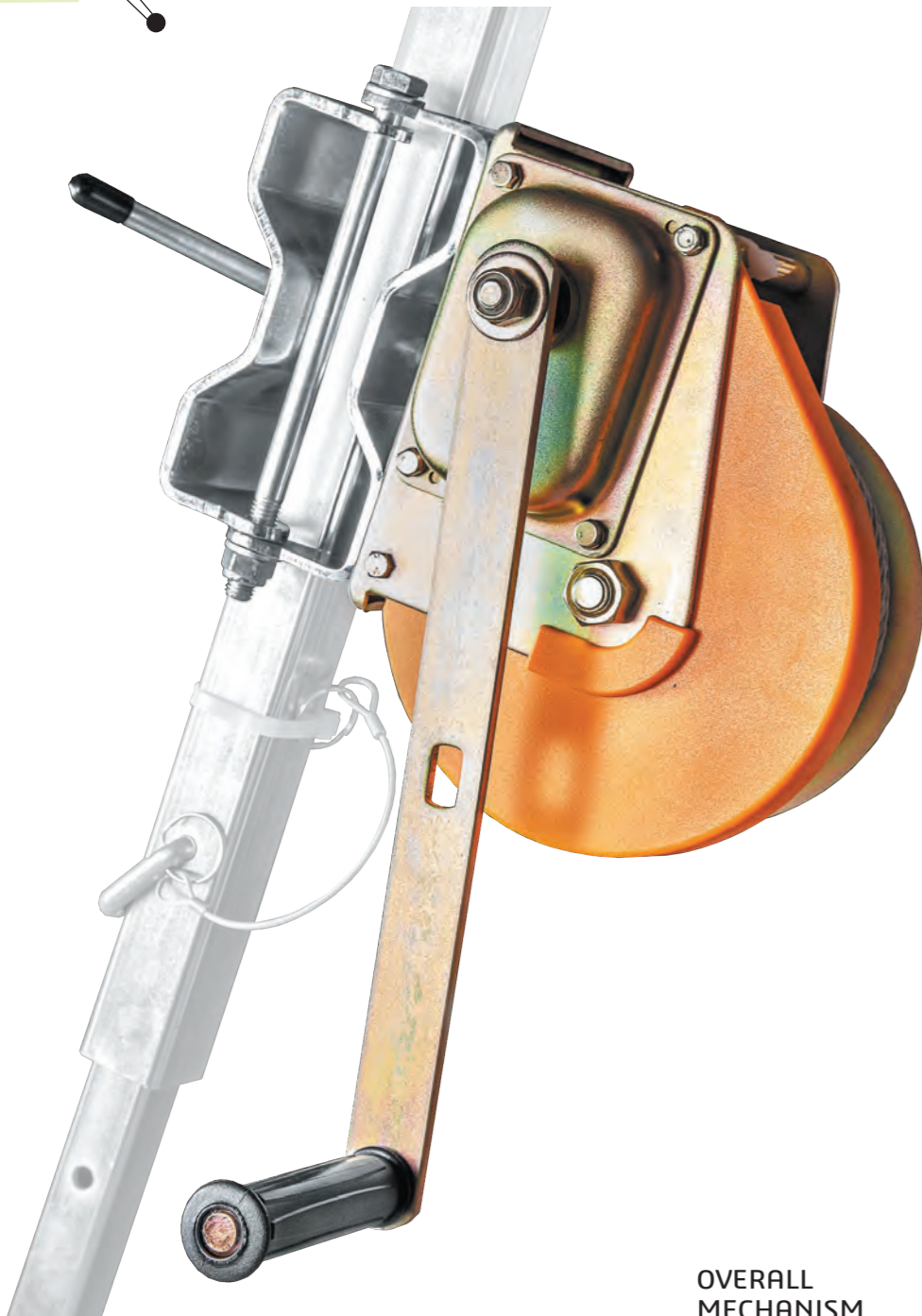
EN 1496/B



1 person  
at max. 140 kg



# RESCUE LIFTING DEVICE RUP 502-B



RUP 502-B is a winch equipped with a clamp for mounting on tripod leg. The winch is equipped with six-strand steel cable with natural fibre kern of 20 and 25 m in length and 6.3 mm in diameter;

RUP 502-B is a component of rescue equipment. The device, can be lifted from a lower level onto a higher level or vice-versa. The descent distance cannot be more than 2 m.

With the ratio used in the mechanism it is possible to make one turn of the drum per 5 turns of the winch's crank.

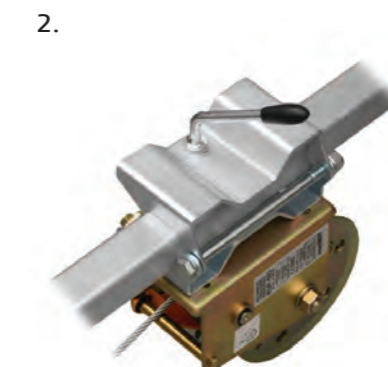
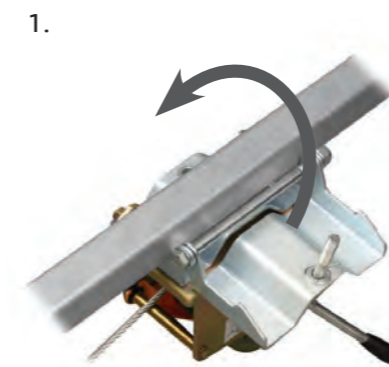
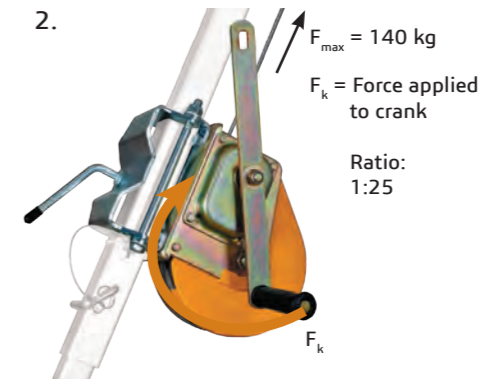
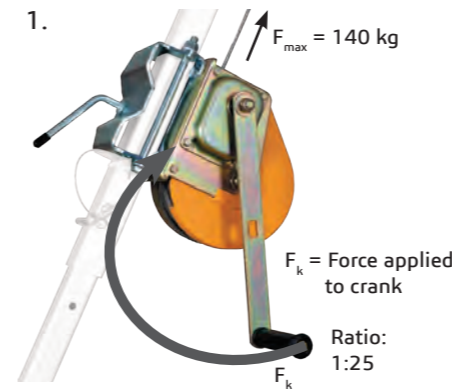
The crank arm is available in 2 lengths which, depending of the variant chosen, enable torque adjustment.

The RUP 502-B rescue device complies with EN 1496/B.

**Accessories:**

Spring-type energy absorber SDW

Pulley PL 101



**LOADS:**

Variant 1:

At load weight (Fmax) of 140 kg force applied to the crank (Fk) shall be 5.6 kG.

Variant 2:

At load weight (Fmax) of 140 kg force applied to the crank (Fk) shall be 11.6 kG.

**ASSEMBLY:**

Simple mounting of the winch on the tripod leg by means of a clamp:

1. Clamp opened;
2. Clamp closed.

**KIT:**

Rescue winch RUP 502-B is offered with pulley PL 101 and spring-type energy absorber SDW.

**CABLE LENGTH VARIANTS:**

- 20 m
- 25 m

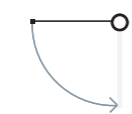
**CABLE PARAMETERS:**



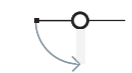
6x19+NFC

∅ 6,3 mm

**OVERALL MECHANISM RATIO:**



Variant 1  
1 : 25



Variant 2  
1 : 12

**SPUR GEARING:**



1 : 5

**COMPATIBLE WITH :**

TM 7

**MAIN FEATURES:**

|   |              |
|---|--------------|
| Winch weight:                               | 13 kg, 14 kg |
| Available cable variants:                   | 20 m, 25 m   |
| Cable diameter:                             | 6,3 mm       |
| Cable type:                                 | 6x19 + NFC   |
| Mechanism ratio:                            | 1 : 5        |
| Force applied to lift 140 kg for variant 1: | 5,6 kG       |
| Force applied to lift 140 kg for variant 2: | 11,6 kG      |
| Permissible work load:                      | 140 kg       |
| Compatible with tripod types:               | TM7          |
| Standard:                                   | EN 1496/B    |

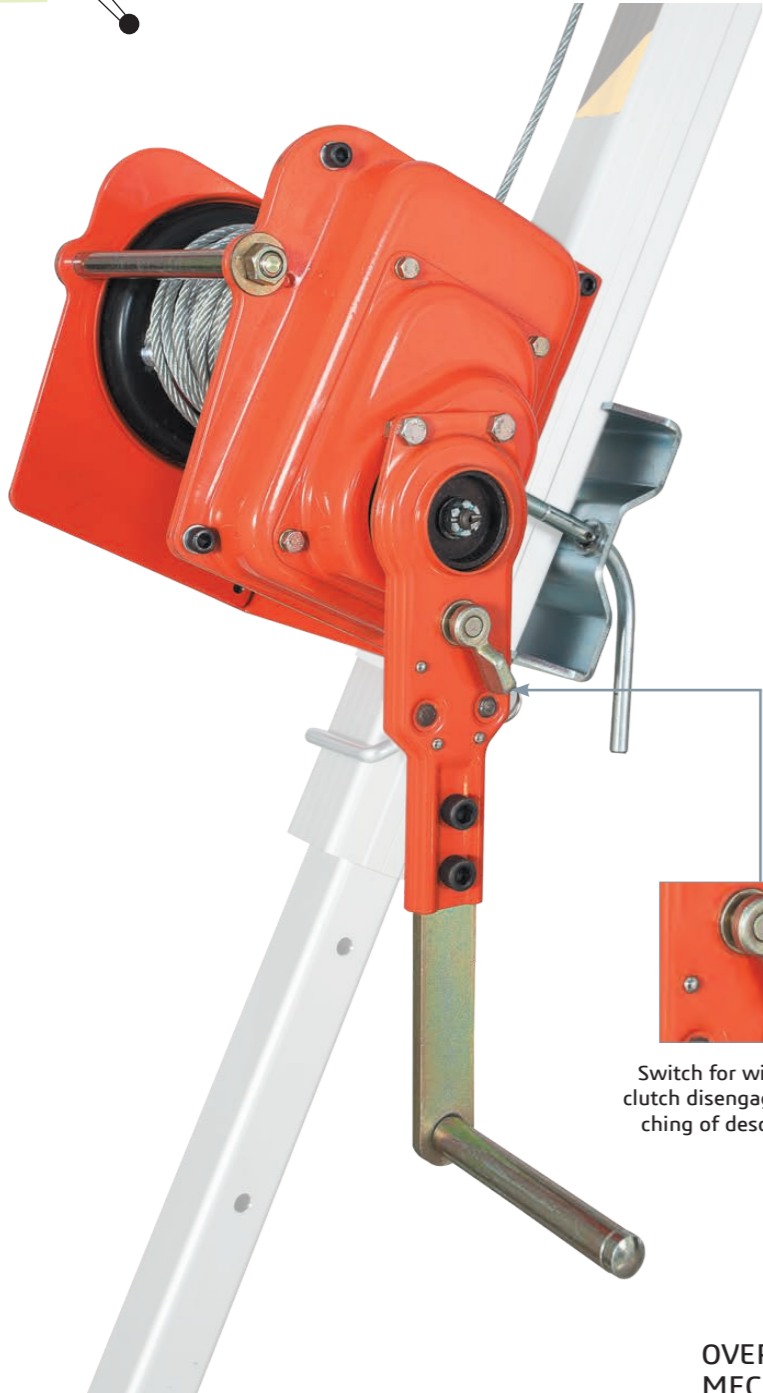


EN 1496/B



1 person at max. 140 kg

# RESCUE LIFTING DEVICE RUP 503



RUP 503 is a winch equipped with clamp for mounting on tripod leg. The winch is equipped with six-strand steel cable with natural fibre kern, available in options of 25 m, 35 m, 45 m, 50 m in length and 6.3 mm in diameter;

RUP 503 is a component of rescue equipment. Using the device, a casualty can be lifted from a lower level onto a higher level or vice-versa. The descent distance cannot be more than 2 m;

With the ratio used in the mechanism it is possible to make one turn of the drum per 7.2 turns of the winch's crank;

Crank arm can be disassembled for easier transport;

The RUP 503 rescue device complies with EN 1496/B.

**Accessories:**

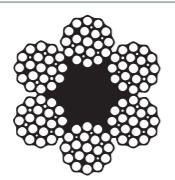
Spring-type energy absorber SDW



**CABLE LENGTH VARIANTS:**

- 25 m
- 35 m
- 45 m
- 50 m

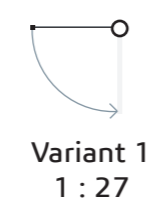
**CABLE PARAMETERS:**



6x19+NFC

∅ 6,3 mm

**OVERALL MECHANISM RATIO:**



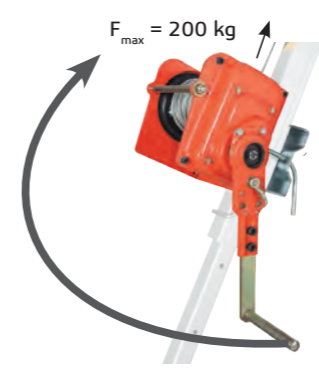
**SPUR GEARING:**



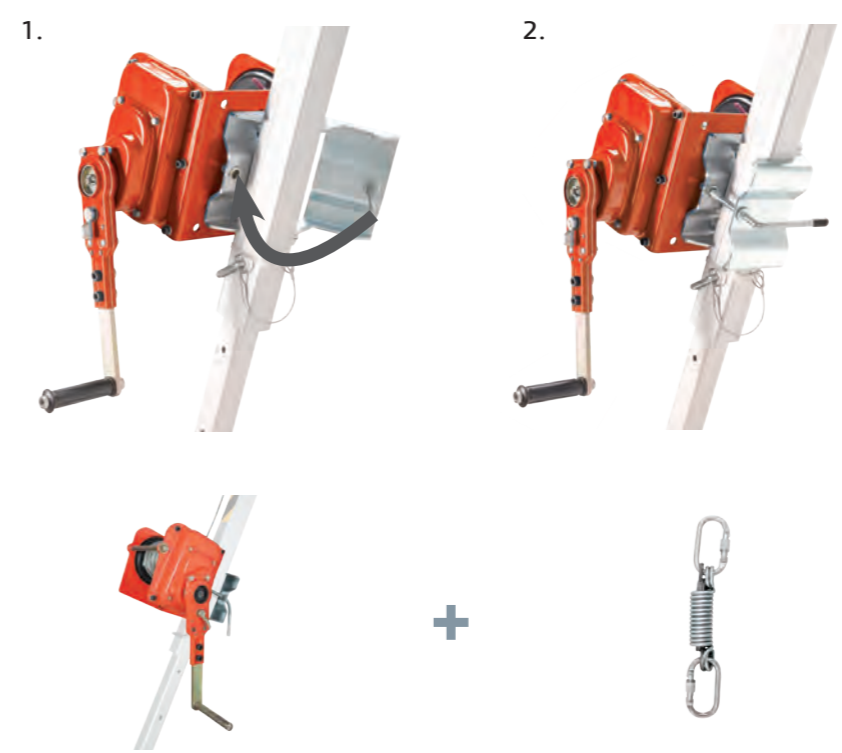
1 : 7,2

**COMPATIBLE WITH :**

- TM 6
- TM 12
- TM 12-2
- TM 13



$F_k$  = Force applied to crank  
Ratio: 1:27



**LOADS:**

At load weight ( $F_{max}$ ) of 200 kg force applied to the crank ( $F_k$ ) shall be 7.41 kG.

**ASSEMBLY:**

Simple mounting of the winch on the tripod leg by means of a clamp:

1. Clamp opened;
2. Clamp closed.

**KIT:**

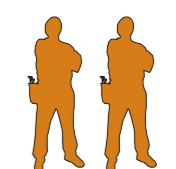
Rescue winch RUP 503 is offered with spring-type energy absorber SDW.

**MAIN FEATURES:**

|  |                          |
|--|--------------------------|
| Winch weight depending on cable length:                | 22,5 kg to 26,2 kg       |
| Cable length:  | 25 m, 35 m, 45 m or 50 m |
| Cable diameter:  | 6,3 mm                   |
| Cable type:  | 6x19 + NFC               |
| Mechanism ratio:                                       | 1 : 7,2                  |
| Force required for pulling load with weight of 200 kg: | 7,41 kG                  |
| Permissible work load:                                 | 200 kg                   |
| Compatible with tripod types:                          | TM6, TM12, TM12-2, TM13  |
| Standard:  | EN 1496/B                |



EN 1496/B



2 persons at max. 200 kg

# RESCUE LIFTING DEVICE RUP 503-B



Switch for winch mechanism clutch disengagement and switching of descent/lift modes.

RUP 503-B is a winch equipped with clamp for mounting on tripod leg. The winch is equipped with six-strand steel cable with natural fibre kern, available in options of 25 m, 35 m, 45 m, 50 m in length and 6.3 mm in diameter;

RUP 503-B is a component of rescue equipment. Using the device, a casualty can be lifted from a lower level onto a higher level or vice-versa. The descent distance cannot be more than 2 m;

With the ratio used in the mechanism it is possible to make one turn of the drum per 7.2 turns of the winch's crank;

Crank arm can be disassembled for easier transport;

The RUP 503-B rescue device complies with EN 1496/B.

**Accessories:**

Spring-type energy absorber SDW

Pulley PL 101

**CABLE LENGTH VARIANTS:**

- 25 m
- 35 m
- 45 m
- 50 m

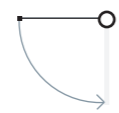
**CABLE PARAMETERS:**



6x19+NFC

∅ 6,3 mm

**OVERALL MECHANISM RATIO:**



Variant 1  
1 : 27

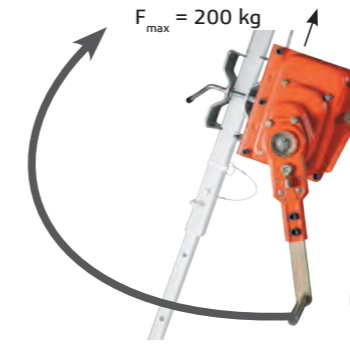
**SPUR GEARING:**



1 : 7,2

**COMPATIBLE WITH :**

TM 7



$F_k$  = Force applied to crank  
Ratio 1:27



**LOADS:**

At load weight ( $F_{max}$ ) of 200 kg force applied to the crank ( $F_k$ ) shall be 7.41 kG.

**ASSEMBLY:**

Simple mounting of the winch on the tripod leg by means of a clamp:

1. Clamp opened;
2. Clamp closed.

**KIT:**

Rescue winch RUP 503-B is offered with pulley PL 101 and spring-type energy absorber SDW.

**MAIN FEATURES:**

|  |                          |
|--|--------------------------|
| Winch weight depending on cable length:                | 22,5 kg to 26,2 kg       |
| Cable length:  | 25 m, 35 m, 45 m or 50 m |
| Cable diameter:  | 6,3 mm                   |
| Cable type:  | 6x19 + NFC               |
| Mechanism ratio:                                       | 1 : 7,2                  |
| Force required for pulling load with weight of 200 kg: | 7,41 kG                  |
| Permissible work load:                                 | 200 kg                   |
| Compatible with tripod types:                          | TM7                      |
| Standard:  | EN 1496/B                |



EN 1496/B



2 persons  
at max. 200 kg

# RESCUE LIFTING DEVICE RUP 505



RUP 505 is a rescue lifting device equipped with clamp for mounting of the device on a tripod leg. The lifting device operates with static textile ropes of length as required by the customer. The rope should be ordered separately.

RUP 505 is a component of rescue equipment. Using the device, a casualty can be lifted from a lower level onto a higher level or vice-versa. The descent distance cannot be more than 2 m;

With the ratio used in the mechanism it is possible to make one turn of the drum per 2.13 turns of the device's crank or in the second mode, 6.2 turns;

The crank is easily dismantled to facilitate transport;

The RUP 505 rescue device complies with EN 1496/B.

### Accessories:

Spring-type energy absorber SDW

Pulley PL 101

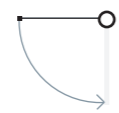
### CABLE LENGTH VARIANTS:

— unlimited  
Rope sold separately

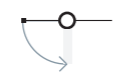
### CABLE PARAMETERS:

∅ 10-11 mm

### OVERALL MECHANISM RATIO:



Variant 1  
1 : 13,5



Variant 2  
1 : 39,9

### SPUR GEARING:



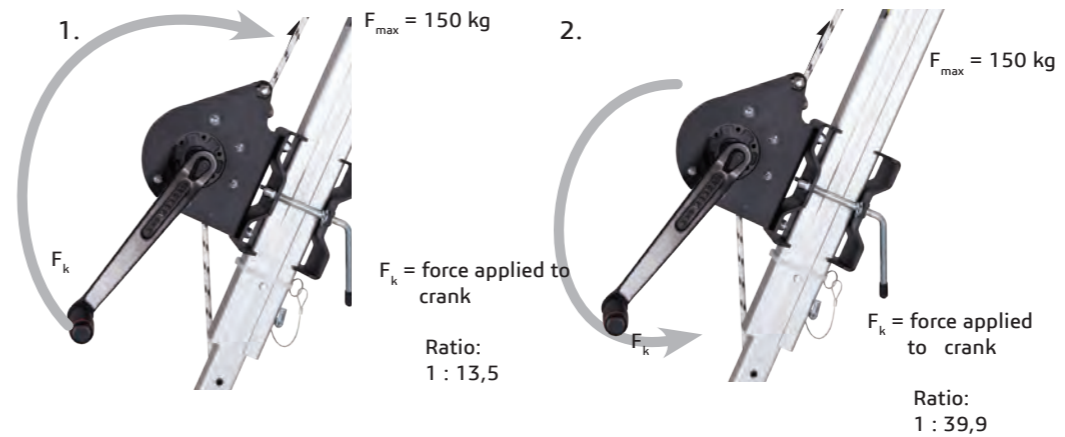
1 : 2,13



1 : 6,28

### COMPATIBLE WITH :

TM 9,  
TM 9-W



### LOADS:

Variant 1:

At load weight ( $F_{max}$ ) of 150 kg force applied to the crank ( $F_k$ ) shall be 11,11 kG

Variant 2:

At load weight ( $F_{max}$ ) of 150 kg force applied to the crank ( $F_k$ ) shall be 3,75 kG

### INSTALLATION:

Simple mounting of the device on the tripod leg by means of a clamp:

1. Clamp opened
2. Clamp closed.



### KIT:

Rescue lifting device RUP 505 is offered with spring-type energy absorber SDW.

### MAIN FEATURES:

|  |   |
|--|---|
| Lifting device weight:                         | 8 kg                                      |
| Rope length:                                   | unlimited                                 |
| Rope type:                                     | od 10 do 11 mm                            |
| Rope diameter:                                 | static textile rope conforms with EN 1891 |
| Mechanism ratio 1:                             | 1 : 2,13                                  |
| Mechanism ratio 2:                             | 1 : 6,28                                  |
| Force applied to lift 150 kg kg for variant 1: | 11,11 kG                                  |
| Force applied to lift 150 kg kg for variant 2: | 3,75 kG                                   |
| Permissible work load:                         | 150 kg                                    |
| Compatible with tripod type:                   | TM9, TM9-W                                |
| Standard:                                      | EN 1496/B                                 |

EN 1496/B



Personal lifting device for up to 150 kg

# RESCUE LIFTING DEVICE RUP 505-A



RUP 505-A is a rescue lifting device equipped with clamp for mounting of the device on a tripod leg. The lifting device operates with static textile ropes of length as required by a customer. The rope should be ordered separately;

RUP 505-A is a component of rescue equipment. Level the device, a casualty can be lifted from a lower level onto a higher level or vice-versa. The descent distance cannot be more than 2 m;

With the ratio used in the mechanism it is possible to make one turn of the drum per 2.13 turns of the device's crank or in the second mode, 6.2 turns;

The crank is easily dismantled to facilitate transport;

The RUP 505-A rescue device complies with EN 1496/B.

#### Accessories:

Spring-type energy absorber SDW

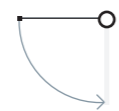
#### CABLE LENGTH VARIANTS:

— unlimited  
Rope sold separately

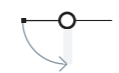
#### CABLE PARAMETERS:

∅ 10-11 mm

#### OVERALL MECHANISM RATIO:



Variant 1  
1 : 13,5



Variant 2  
1 : 39,9

#### SPUR GEARING:



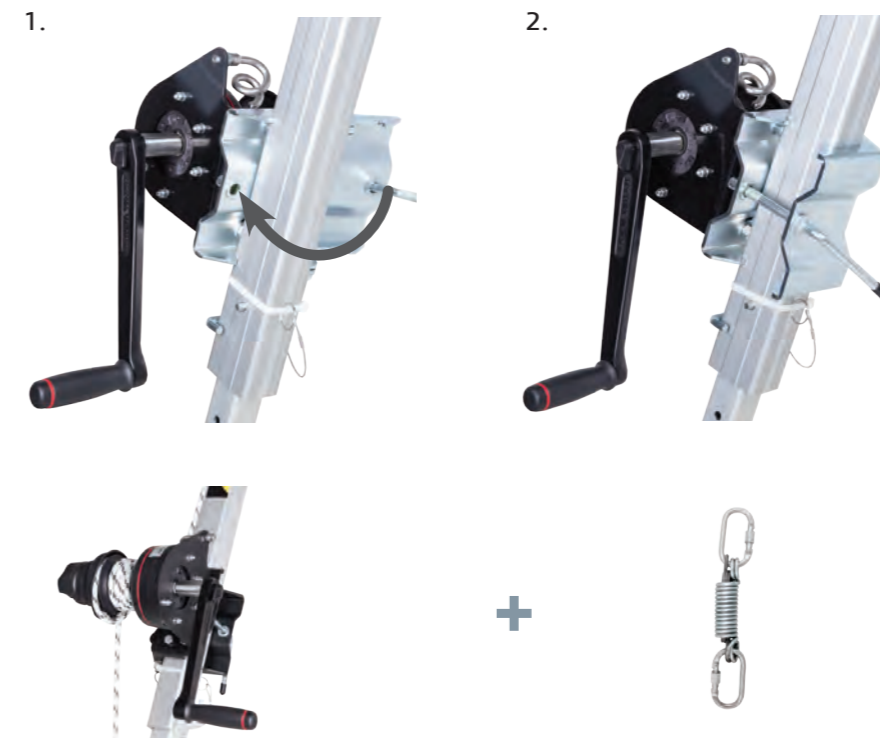
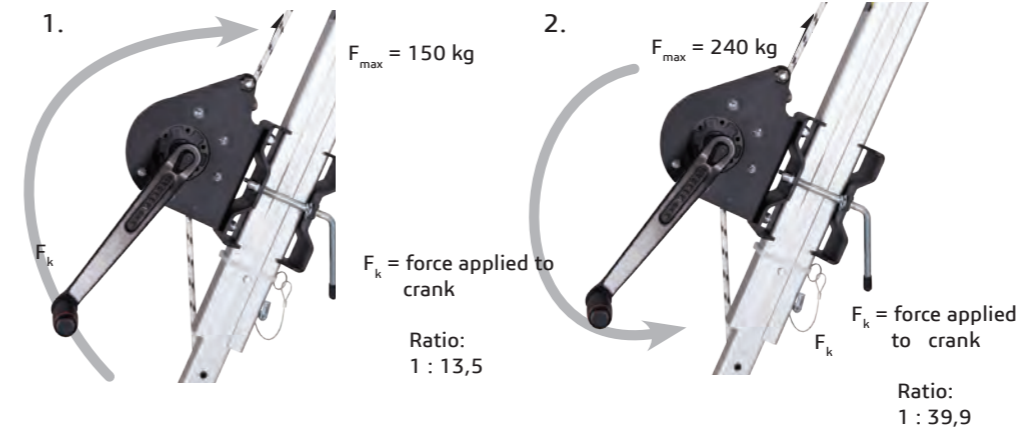
1 : 2,13



1 : 6,28

#### COMPATIBLE WITH :

TM 13



#### LOADS:

##### Variant 1:

At load weight ( $F_{max}$ ) of 240 kg force applied to the crank ( $F_k$ ) shall be 17.7 kg.

##### Variant 2:

At load weight ( $F_{max}$ ) of 240 kg force applied to the crank ( $F_k$ ) shall be 6 kg.

#### INSTALLATION:

Simple mounting of the device on the tripod leg by means of a clamp:

1. Clamp opened
2. Clamp closed.

#### KIT:

Rescue lifting device RUP 505-A is offered with spring-type energy absorber SDW.

#### MAIN FEATURES:

|  |   |
|--|---|
| Lifting device weight:                         | 8 kg                                      |
| Rope length:                                   | unlimited                                 |
| Rope type:                                     | od 10 do 11 mm                            |
| Rope diameter:                                 | static textile rope conforms with EN 1891 |
| Mechanism ratio 1:                             | 1 : 2,13                                  |
| Mechanism ratio 2:                             | 1 : 6,28                                  |
| Force applied to lift 200 kg kg for variant 1: | 17,7 kG                                   |
| Force applied to lift 200 kg kg for variant 2: | 6 kG                                      |
| Permissible work load:                         | 240 kg                                    |
| Compatible with tripod type:                   | TM13                                      |
| Standard:                                      | EN 1496/B                                 |

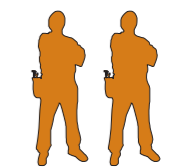
#### ADDITIONAL OPTION:

##### Rope guide

Guide a textile rope when tripod TM 13 is used with lifting device RUP 505-A.



EN 1496/B



Personal lifting device for up to 240 kg

# RETRACTABLE TYPE FALL ARRESTER CRW 200



CRW 200 is a combination of a retractable type fall arrester and a rescue lifting device. The device is equipped with a manual winch featuring lift and descent functions. In order to install on the tripod, first mount an adequate mounting clamp;

Connector has a fall indicator; the design requires no energy absorber;

Permissible work load: 140 kg;

With the ratio used in the mechanism it is possible to make one turn of the drum per 7.4 turns of the winch's crank;

Retractable type fall arrester CRW 200 is a component of personal fall protection equipment and conforms to EN 360 and EN 1496/B.



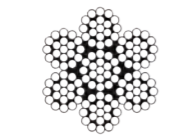
At load weight ( $F_{max}$ ) of 140 kg force applied to the crank ( $F_k$ ) shall be 6.4 kg.

Hook with fall indicator

CABLE LENGTH VARIANTS:

15 m

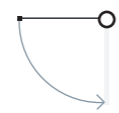
CABLE PARAMETERS:



7x19 + IWRC

∅ 4,7 mm

OVERALL MECHANISM RATIO:



Variant 1  
1 : 22

SPUR GEARING:



1 : 8,8

COMPATIBLE WITH :

Compatible with ALL personal tripod types.



Clamp for mounting retractable type fall arrester CRW 200 on the tripod leg. According to the leg thickness, either clamp AT 173 or AT 174 is used. The clamp is simple to mount and is made of galvanized steel. Above is an example mounting of clamp AT 173 on tripod TM 9 leg.

Example mounting of fall arrester CRW 200 by means of clamp AT 173 on tripod TM 9 leg.



Side anchor point on tripod head can be used to attach fall arrester CRW 200 by means of connector AZ 017.

Example mounting of fall arrester CRW 200 by means of side anchor point on tripod TM 9 head.

### MAIN FEATURES:

|   |  |
|---|--|
| Winch weight:   | 11 kg  |
| Cable length:   | 15 m   |
| Cable diameter:   | 4,8 mm   |
| Cable type:   | 7x19 + IWRC                                    |
| Mechanism ratio:  | 1 : 8,8  |
| Force required for pulling load with weight of 140 kg:      | 6.4 kg   |
| Permissible work load:                                      | 140 kg   |
| Standard:   | EN 1496/B                                      |
| When clamp AT 173 is used, compatible with tripod type:     | TM9, TM9-L, TM9-W                              |
| When clamp AT 174 is used, compatible with tripod type:     | TM6, TM12, TM12-2, TM13                        |
| When connector AZ 017 is used, compatible with tripod type: | TM6, TM7, TM9, TM9-L, TM10, TM12, TM12-2, TM13 |



EN 1496/B  
EN 360



1 person  
at max. 140 kg



# RETRACTABLE TYPE FALL ARRESTER CRW 300



CRW 300 is a combination of a retractable type fall arrester and a rescue lifting device. The device is equipped with a manual winch featuring lift and descent functions. In order to install on the tripod, first mount an adequate mounting clamp;

Connector has a fall indicator; the design requires no energy absorber;

Permissible work load: 140 kg;

With the ratio used in the mechanism it is possible to make one turn of the drum per 7.4 turns of the winch's crank;

Retractable type fall arrester CRW 300 is a component of personal fall protection equipment and conforms to EN 360 and EN 1496/B.



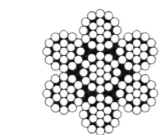
At load weight ( $F_{max}$ ) of 140 kg force applied to the crank ( $F_k$ ) shall be 6.3 kG.

Hook with fall indicator

CABLE LENGTH VARIANTS:

25 m

CABLE PARAMETERS:



7x19 + IWRC

ø 4,7 mm

OVERALL MECHANISM RATIO:

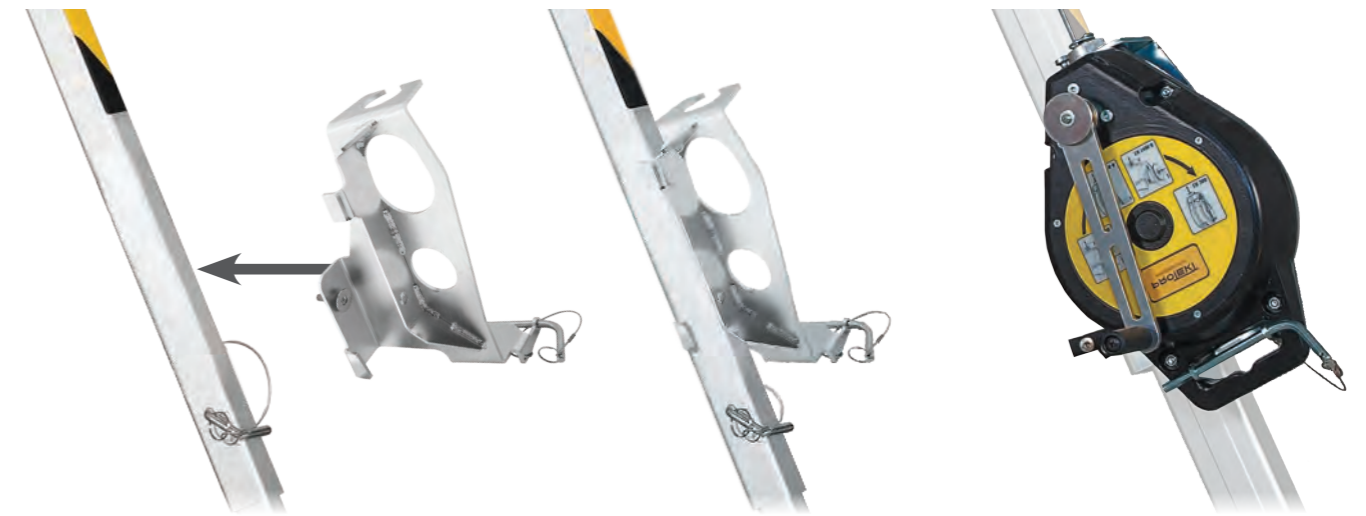
Variant 1  
1 : 22

SPUR GEARING:

1 : 7,4

COMPATIBLE WITH :

Compatible with ALL personal tripod types.



Clamp for mounting retractable type fall arrester CRW 300 on the tripod leg. According to the leg thickness, either clamp AT 171 or AT 172 is used. The clamp is simple to mount and is made of galvanized steel. Above is an example mounting of clamp AT 171 on tripod TM 9 leg.

Example mounting of fall arrester CRW 300 by means of clamp AT 172 on tripod TM 13 leg.



Side anchor point on tripod head can be used to attach fall arrester CRW 300 by means of connector AZ 017.

Example mounting of fall arrester CRW 300 by means of side anchor point on tripod TM 6 head.

### MAIN FEATURES:

|   |  |
|---|--|
| Winch weight:   | 15 kg  |
| Cable length:   | 25 m   |
| Cable diameter:   | 4,8 mm   |
| Cable type:   | 7x19 + IWRC                                    |
| Mechanism ratio:  | 1 : 7,4  |
| Force required for pulling load with weight of 140 kg:      | 6.3 kG   |
| Permissible work load:                                      | 140 kg   |
| Standard:   | EN 1496/B                                      |
| When clamp AT 171 is used, compatible with tripod type:     | TM9, TM9-L, TM9-W                              |
| When clamp AT 172 is used, compatible with tripod type:     | TM6, TM12, TM12-2, TM13                        |
| When connector AZ 017 is used, compatible with tripod type: | TM6, TM7, TM9, TM9-L, TM10, TM12, TM12-2, TM13 |



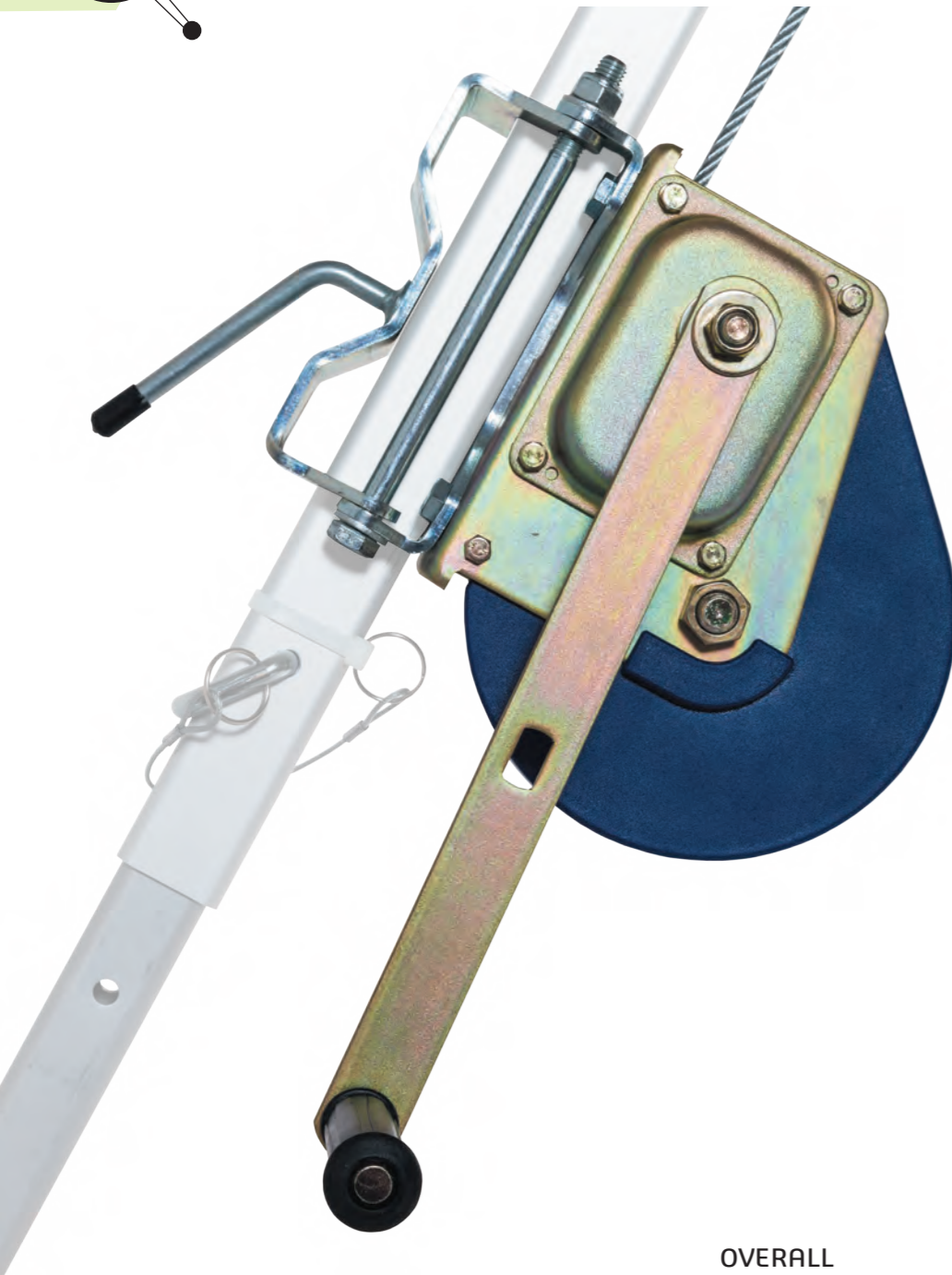
EN 1496/B  
EN 360



1 person  
at max. 140 kg



# RESCUE LIFTING DEVICE RUP 502-T



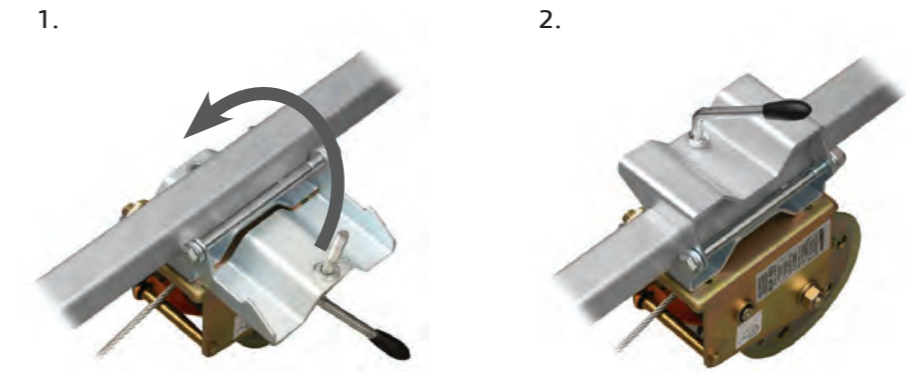
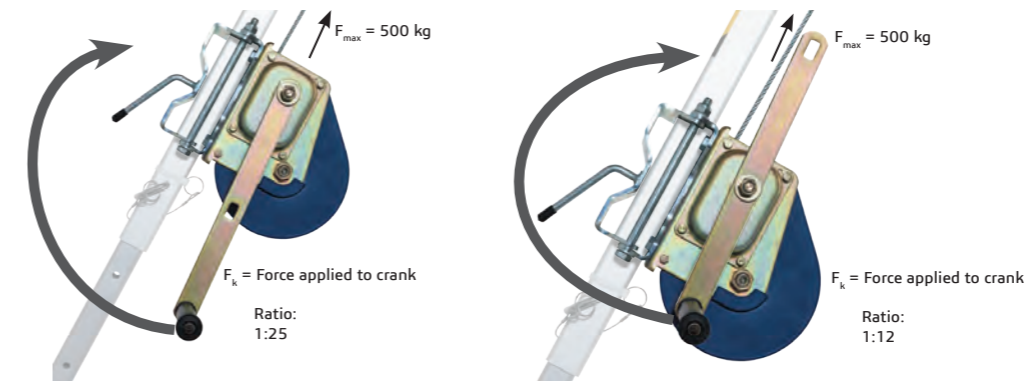
RUP 502-T is a winch equipped with clamp for mounting on tripod leg. The winch is equipped with six-strand steel cable with natural fibre kern of 20 and 25 m in length and 6.3 mm in diameter;

Intended for lifting loads with weight of up to 500 kg;

With the ratio used in the mechanism it is possible to make one turn on the drum per 5 turns of the winch's crank;

The crank arm is available in 2 lengths which, depending on the variant chosen, enable torque adjustment;

**Accessories:**  
Pulley PL 101



**LOADS:**

Variant 1:  
At load weight (Fmax) of 500 kg force applied to the crank (Fk) shall be 20 kG.  
Variant 2:  
At load weight (Fmax) of 500 kg force applied to the crank (Fk) shall be 41.6 kG.

**ASSEMBLY:**

Simple mounting of the winch on the tripod leg by means of a clamp:  
1. Clamp opened;  
2. Clamp closed.

**KIT:**

Rescue winch RUP 502-T is offered with pulley PL 101.

**MAIN FEATURES:**

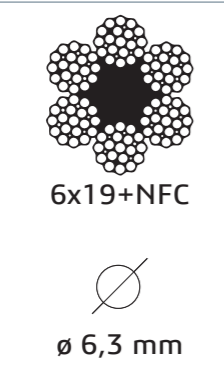
|   |              |
|---|--------------|
| Winch weight:                               | 13 kg, 14 kg |
| Available cable variants:                   | 20 m, 25 m   |
| Cable diameter:                             | 6,3 mm       |
| Cable type:                                 | 6x19 + NFC   |
| Mechanism ratio:                            | 1 : 5        |
| Force applied to lift 140 kg for variant 1: | 20 kG        |
| Force applied to lift 140 kg for variant 2: | 41,6 kG      |
| Permissible work load:                      | 500 kg       |
| Compatible with tripod types:               | TM9-T        |



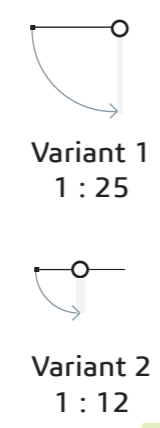
**CABLE LENGTH VARIANTS:**

- 20 m
- 25 m

**CABLE PARAMETERS:**



**OVERALL MECHANISM RATIO:**



**SPUR GEARING:**



**COMPATIBLE WITH :**

TM 9-T



# RESCUE LIFTING DEVICE RUP 502-AT



RUP 502-AT is a winch equipped with clamp for mounting on tripod's leg. The winch is equipped with six-strand steel cable with natural fibre kern of 25 m in length and 6.3 mm in diameter;

Intended for lifting loads with weight of up to 500 kg;

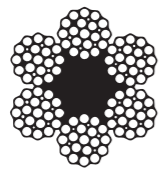
With the ratio used in the mechanism it is possible to make one turn of the drum per 5 turns of the winch's crank;

The crank's arm is available in 2 lengths which, depending of the variant chosen, enable torque adjustment.

**CABLE LENGTH VARIANTS:**

- 20 m
- 25 m

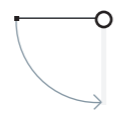
**CABLE PARAMETERS:**



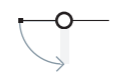
6x19+NFC

∅ 6,3 mm

**OVERALL MECHANISM RATIO:**



Variant 1  
1 : 25



Variant 2  
1 : 12

**SPUR GEARING:**

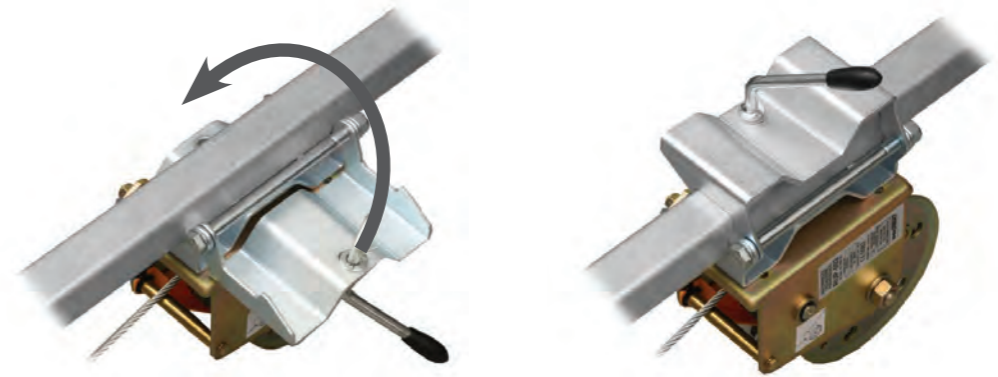


1 : 5

**COMPATIBLE WITH :**

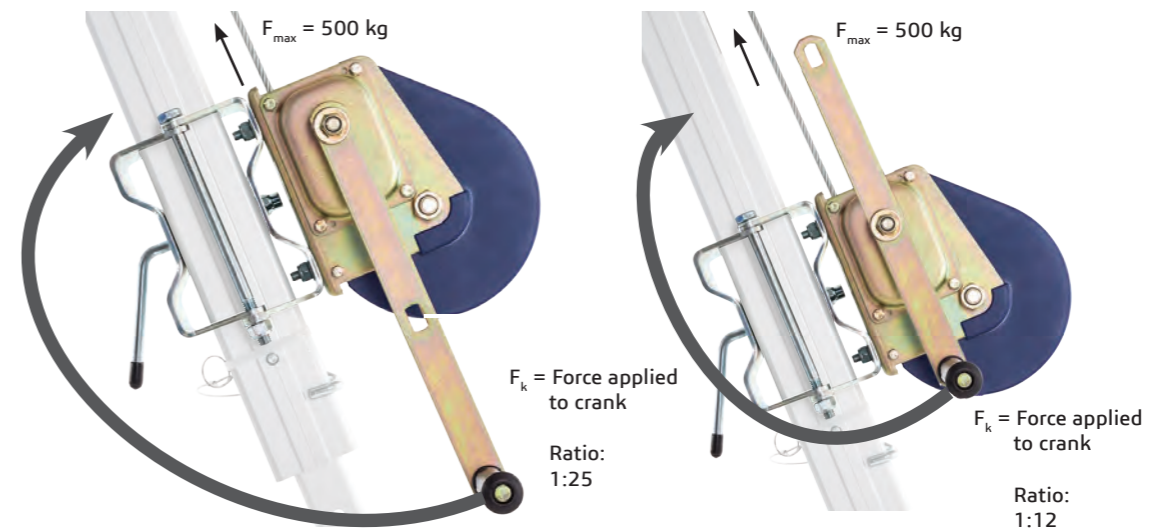
- TM 6-T
- TM 11-T2
- TM 12
- TM 12-2
- TM 13-T

**ASSEMBLY:**



Mounting winch on tripod's leg – clamp opened and closed.

**LOADS:**



Variant 1:

At load weight ( $F_{max}$ ) of 500 kg force applied to the crank ( $F_k$ ) shall be 20 kG.

Variant 2:

At load weight ( $F_{max}$ ) of 500 kg force applied to the crank ( $F_k$ ) shall be 41.6 kG.

**MAIN FEATURES:**

|   |                                       |
|---|---------------------------------------|
| Winch weight:                               | 13 kg, 14 kg                          |
| Available cable variants:                   | 20 m, 25 m                            |
| Cable diameter:                             | 6,3 mm                                |
| Cable type:                                 | 6x19 + NFC                            |
| Mechanism ratio:                            | 1 : 5                                 |
| Force applied to lift 140 kg for variant 1: | 20 kG                                 |
| Force applied to lift 140 kg for variant 2: | 41,6 kG                               |
| Permissible work load:                      | 500 kg                                |
| Compatible with tripod types:               | TM6-T, TM11-T2, TM-13-T, TM12, TM12-2 |



Capacity of up to 500 kg



# RESCUE LIFTING DEVICE RUP 502-BT



RUP 502-BT is a winch equipped with clamp for mounting on tripod leg. The winch is equipped with six-strand steel cable with natural fibre kern of 25 m in length and 6.3 mm in diameter;

Intended for lifting loads with weight of up to 500 kg;

With the ratio used in the mechanism it is possible to make one turn of the drum per 5 turns of the winch's crank;

The crank arm is available in 2 lengths which, depending of the variant chosen, enable torque adjustment.

### Accessories:

Pulley PL 101

### CABLE LENGTH VARIANTS:

- 20 m
- 25 m

### CABLE PARAMETERS:



6x19+NFC

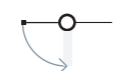


ø 6,3 mm

### OVERALL MECHANISM RATIO:



Variant 1  
1 : 25



Variant 2  
1 : 12

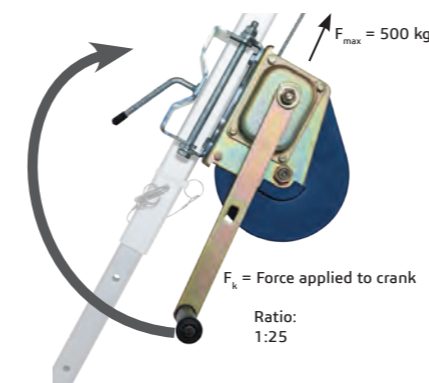
### SPUR GEARING:



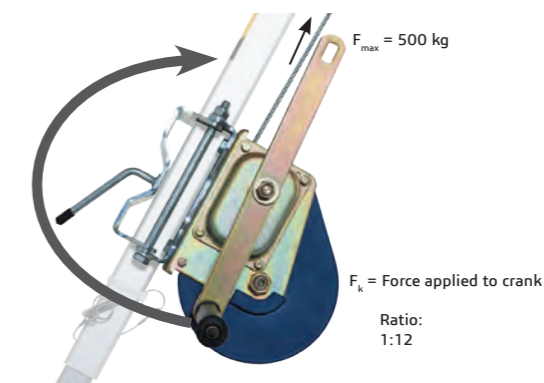
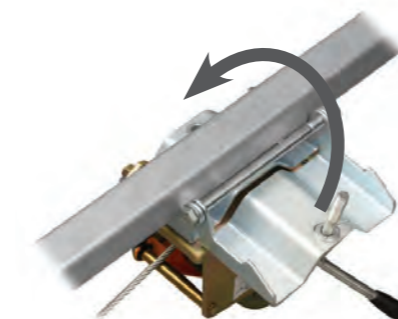
1 : 5

### COMPATIBLE WITH :

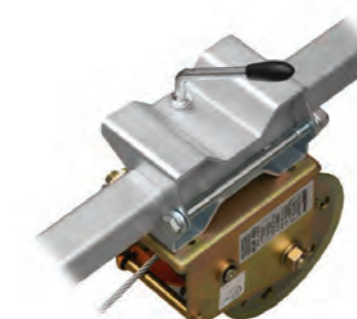
TM 7-T



1.



2.



### LOADS:

Variant 1:

At load weight (F<sub>max</sub>) of 500 kg force applied to the crank (F<sub>k</sub>) shall be 20 kG.

Variant 2:

At load weight (F<sub>max</sub>) of 500 kg force applied to the crank (F<sub>k</sub>) shall be 41.6 kG.

### ASSEMBLY:

Simple mounting of the winch on the tripod leg by means of a clamp:

1. Clamp opened;
2. Clamp closed.

### KIT:

Rescue winch RUP 502-BT is offered with pulley PL 101.

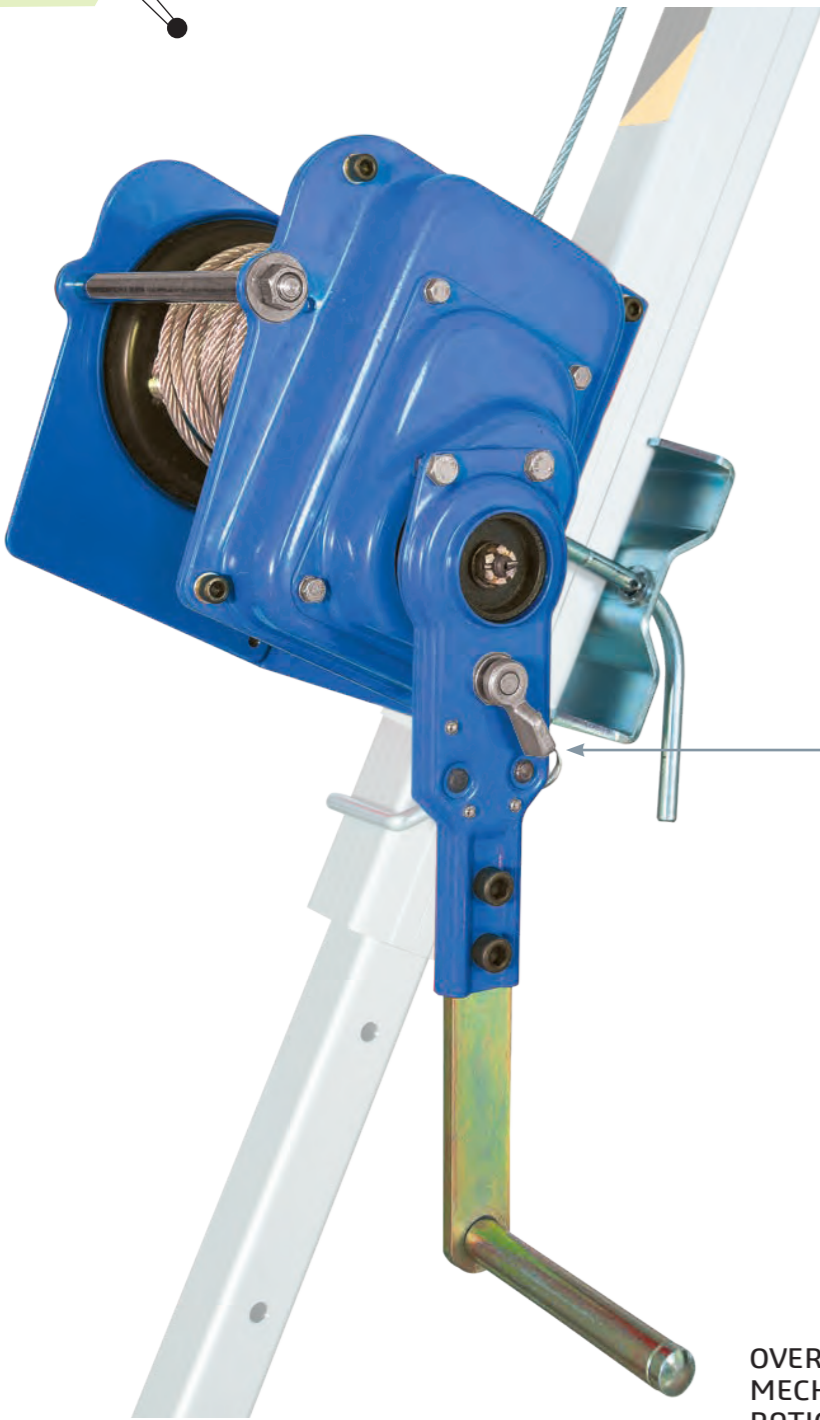
### MAIN FEATURES:

|   |              |
|---|--------------|
| Winch weight:                               | 13 kg, 14 kg |
| Available cable variants:                   | 20 m, 25 m   |
| Cable diameter:                             | 6,3 mm       |
| Cable type:                                 | 6x19 + NFC   |
| Mechanism ratio:                            | 1 : 5        |
| Force applied to lift 140 kg for variant 1: | 20 kG        |
| Force applied to lift 140 kg for variant 2: | 41,6 kG      |
| Permissible work load:                      | 500 kg       |
| Compatible with tripod types:               | TM7-T        |



Capacity of up to 500 kg

# RESCUE LIFTING DEVICE RUP 503-T



RUP 503-T is a winch equipped with clamp for mounting on tripod leg. The winch is equipped with six-strand steel cable with natural fibre kern, available in options of 25 m, 35 m, 45 m, 50 m in length and 6.3 mm in diameter;

Intended for lifting loads with weight of up to 1000 kg;

With the ratio used in the mechanism it is possible to make one turn of the drum per 22.2 turns of the winch's crank;

Crank arm can be disassembled for easier transport.



Switch for winch mechanism clutch disengagement and switching of descent/lift modes.

**CABLE LENGTH VARIANTS:**

- 25 m
- 35 m
- 45 m
- 50 m

**CABLE PARAMETERS:**

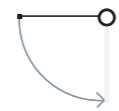


6x19+NFC



ø 6,3 mm

**OVERALL MECHANISM RATIO:**



Variant 1  
1 : 83,3

**SPUR GEARING:**

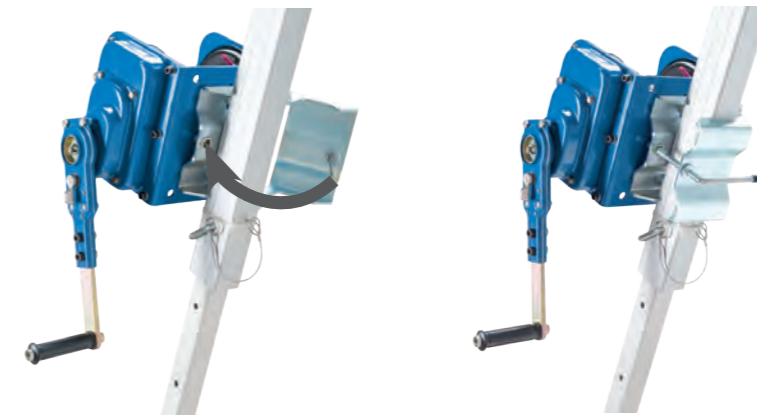


1 : 22,2

**COMPATIBLE WITH :**

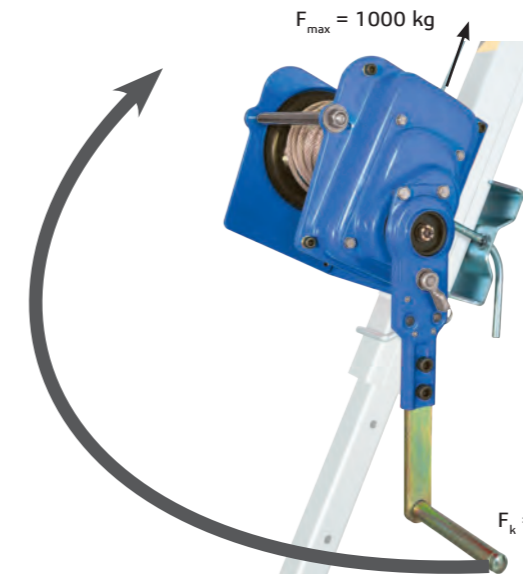
TM 6-T  
TM 12  
TM 12-2  
TM 13-T

**ASSEMBLY:**



Mounting winch on tripod leg – clamp opened and closed.

**LOADS:**



At load weight ( $F_{max}$ ) of 1000 kg force applied to the crank ( $F_k$ ) shall be 12 kG.

$F_k$  = Force applied to crank  
Ratio: 1:83,3

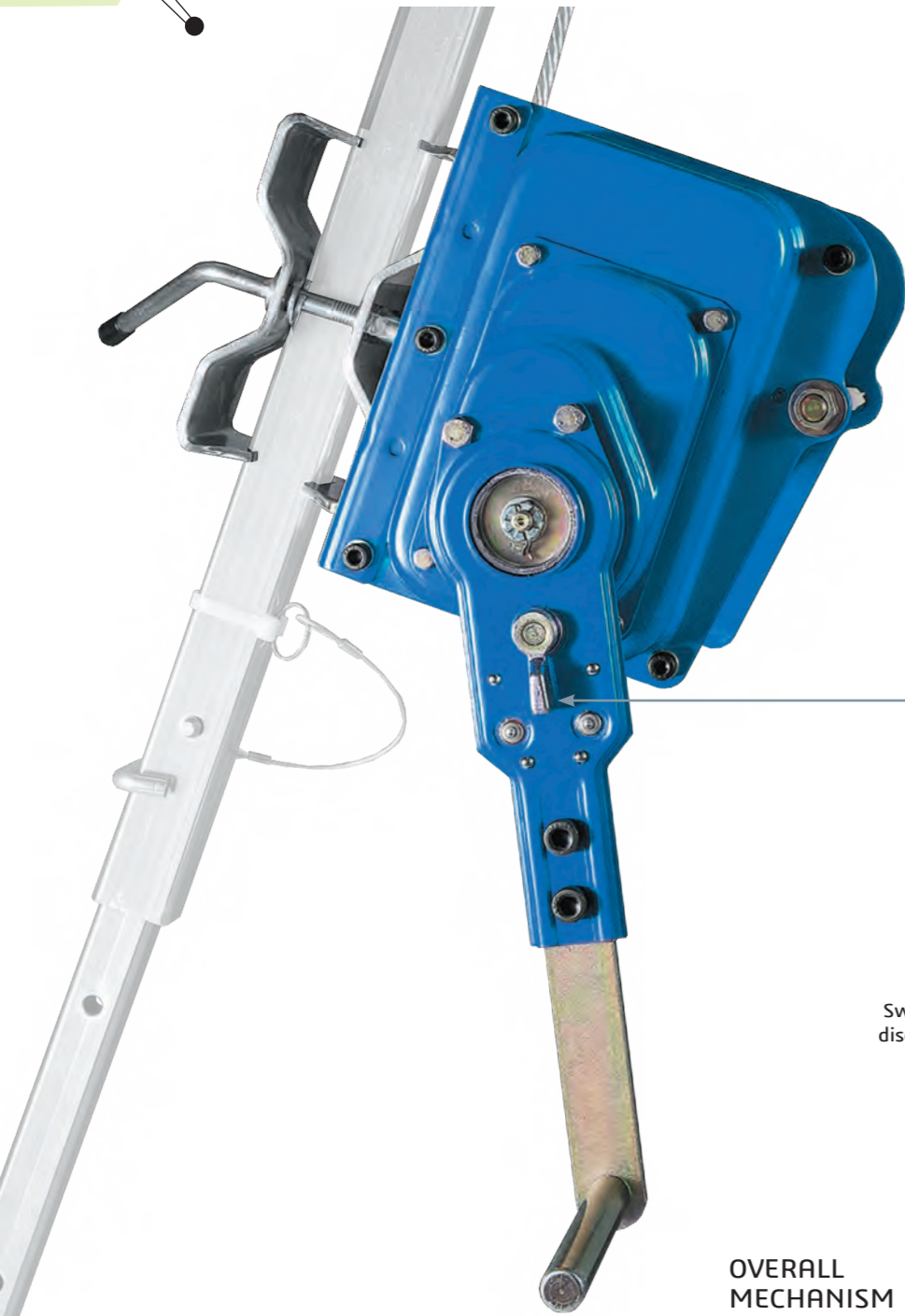
**MAIN FEATURES:**

|   |                             |
|---|-----------------------------|
| Winch weight:   | 22,5 kg to 26,2 kg          |
| Cable diameter:   | 25 m, 35 m, 45 m or 50 m    |
| Cable type:   | 6,3 mm                      |
| Cable type:   | 6x19 + NFC                  |
| Mechanism ratio:  | 1 : 22,2                    |
| Force required for pulling load with weight of 1000 kg: | 12 kG                       |
| Permissible work load:                                  | 1000 kg                     |
| Compatible with tripod types:                           | TM6-T, TM12, TM12-2, TM13-T |



Capacity of up to 1000 kg

# RESCUE LIFTING DEVICE RUP 503-BT



RUP 503-BT is a winch equipped with clamp for mounting on tripod leg. The winch is equipped with six-strand steel cable with natural fibre kern, available in options of 25 m, 35 m, 45 m, 50 m in length and 6.3 mm in diameter;

Intended for lifting loads with weight of up to 1000 kg;

With the ratio used in the mechanism it is possible to make one turn of the drum per 22.2 turns of the winch's crank;

Crank arm can be disassembled for easier transport.

**Accessories:**  
Pulley PL 101

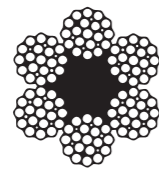


Switch for winch mechanism clutch disengagement and switching of descent/lift modes.

**CABLE LENGTH VARIANTS:**

- 25 m
- 35 m
- 45 m
- 50 m

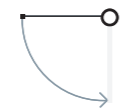
**CABLE PARAMETERS:**



6x19+NFC

∅ 6,3 mm

**OVERALL MECHANISM RATIO:**



Variant 1  
1 : 83,3

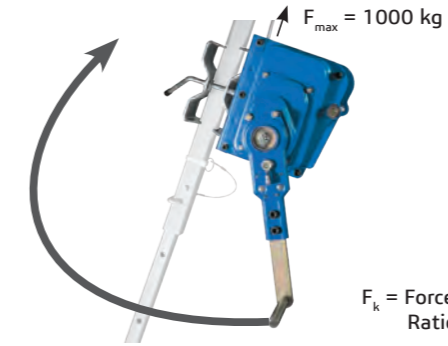
**SPUR GEARING:**



1 : 22,2

**COMPATIBLE WITH :**

TM 7-T



$F_k$  = Force applied to crank  
Ratio 1:83,3



**LOADS:**

At load weight ( $F_{max}$ ) of 1000 kg force applied to the crank ( $F_k$ ) shall be 12 kG.

**ASSEMBLY:**

Simple mounting of the winch on the tripod leg by means of a clamp:

1. Clamp opened;
2. Clamp closed.

**KIT:**

Rescue winch RUP 503-BT is offered with pulley PL 101.

**MAIN FEATURES:**

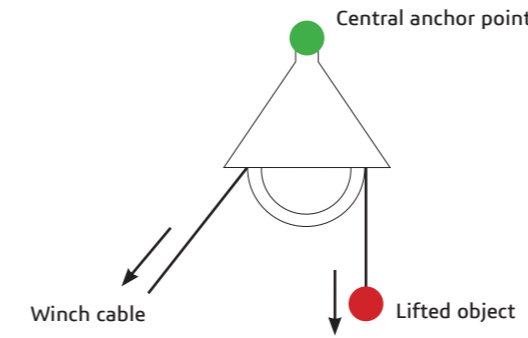
|   |                          |
|---|--------------------------|
| Winch weight:   | 22,5 kg to 26,2 kg       |
| Cable diameter:   | 25 m, 35 m, 45 m or 50 m |
| Cable type:   | 6,3 mm                   |
| Cable type:   | 6x19 + NFC               |
| Mechanism ratio:  | 1 : 22,2                 |
| Force required for pulling load with weight of 1000 kg: | 12 kG                    |
| Permissible work load:                                  | 1000 kg                  |
| Compatible with tripod types:                           | TM7-T                    |





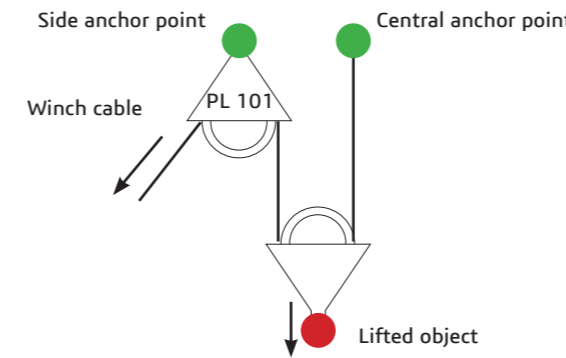
# PULLEYS

## PL 101, TU 415, TU 416



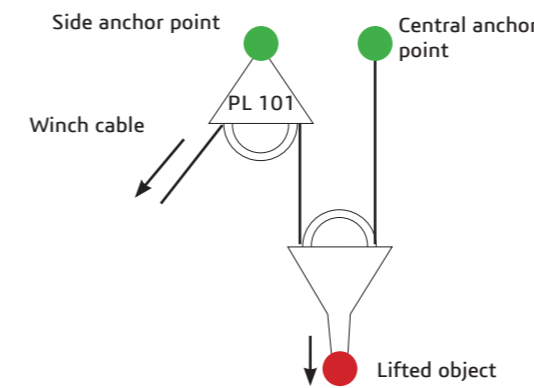
### PL 101

Basic pulley of 90 mm in diameter attached at anchor point on the tripod head. Made of galvanized steel and polyamide. Connected to anchor point by means of connector AZ 090. Pulley is a component of winches RUP 502, RUP 502-B, RUP 502-BT, RUP 502-T, RUP 503-B, RUP 503-BT.



### TU 415

Pulley TU 415 with steel hook is used for lifting and lowering loads with weight of up to 1000 kg. It can be used both with steel cables (of up to 6.3 mm in diameter) and textile ropes (of diameters between 8 and 12 mm). The mechanism ratio 2:1 enables reduction of the force required to lift a given load, thus allowing for as much as twice the load using a given winch. The product can be used with all winches and Protekt tripods. When used with tripods and winches with admissible load of 500 kg (TM 9 series) it is possible to increase the load capacity of the whole combination up to 1000 kg.



### TU 416

Pulley TU 416 with steel hook is used for lifting and lowering loads with weight of up to 2000 kg. It can be used both with steel cables (between 6.3 and 8.0 mm in diameter) and textile ropes (of diameters between 10,5 and 14 mm). The mechanism ratio 2:1 enables reduction of the force required to lift a given load, thus allowing for as much as twice the load using a given winch. The product can be used with all winches and Protekt tripods. When used with tripods and winches with admissible load of 1000 kg (TM 6-T, TM 11-T, TM 13-T, TM 12, TM 12-2) it is possible to increase the load capacity of the whole combination up to 2000 kg.



### MAIN FEATURES:

#### CABLE DIAMETER:

∅ max. 6.3 mm for steel cable

∅ between 8 and 12 mm for textile rope

#### WORK LOAD:

↓ Permissible work load: 10 kN

#### CABLE DIAMETER:

∅ max. 6.3 mm for steel cable

∅ between 8 and 12 mm for textile rope

#### WORK LOAD:

↓ Permissible work load: 10 kN

#### CABLE DIAMETER:

∅ between 6.3 mm and 8 mm for steel cable

∅ between 10,5 and 14 mm for textile rope

#### WORK LOAD:

↓ Permissible work load: 20 kN

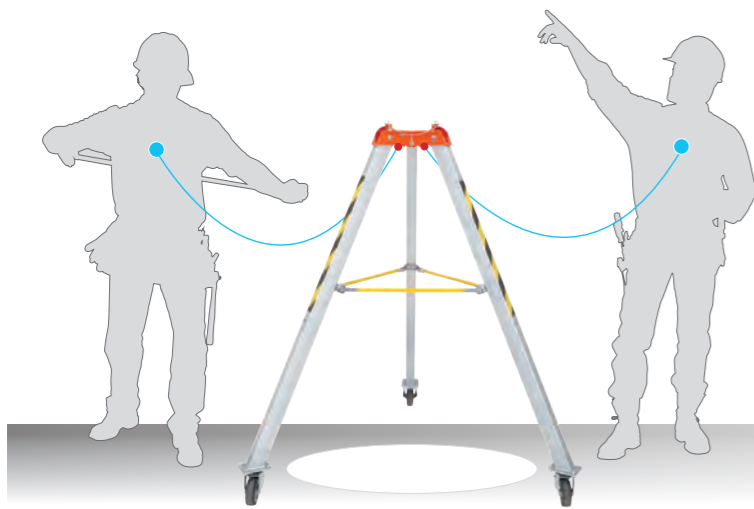
|                         | PL 101                      | TU 415                      | TU 416                      |
|-------------------------|-----------------------------|-----------------------------|-----------------------------|
| Material:               | Polyamide, galvanized steel | Polyamide, galvanized steel | Cast iron, galvanized steel |
| Weight:                 | 0,45 kg                     | 1,14 kg                     | 2,54 kg                     |
| Pulley wheel diameter:  | 90 mm                       | 90 mm                       | 110 mm                      |
| Dimensions:             | 133x56x128 mm               | 300x130x56 mm               | 330x130x56 mm               |
| Static strength:        | 15 kN                       | 10 kN                       | 20 kN                       |
| Breaking strength:      | 30 kN                       | 50 kN                       | 60 kN                       |
| Admissible weight load: | 1000 kg                     | 1000 kg                     | 2000 kg                     |



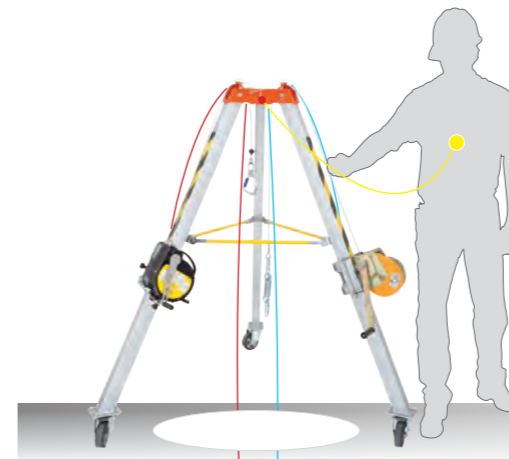
# TRIPOD SETS



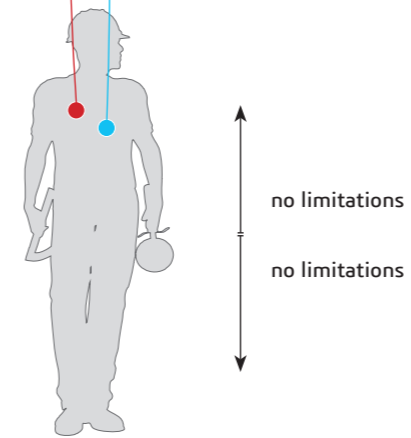
# EXAMPLE USES OF TRIPOD SETS



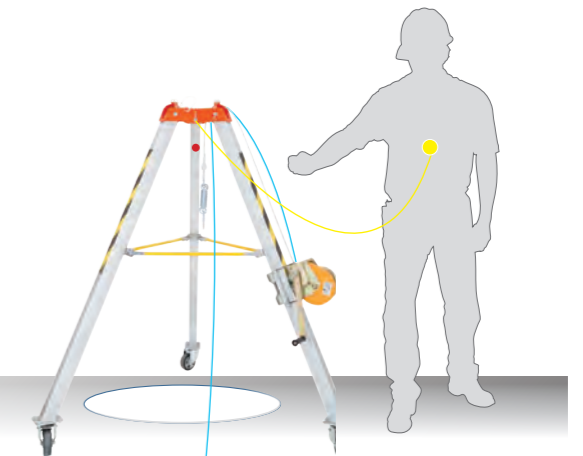
USE OF THE TRIPOD WITHOUT LIFTING DEVICES AS A MOBILE ANCHOR POINT.



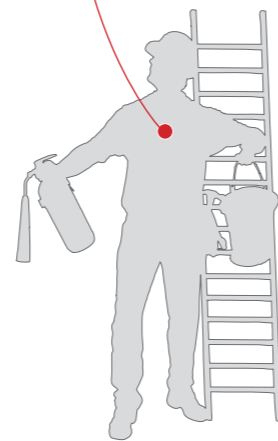
USE OF THE TRIPOD WITH LIFTING DEVICE AND RETRACTABLE TYPE FALL ARRESTER TO LIFT/LOWER A WORKER.



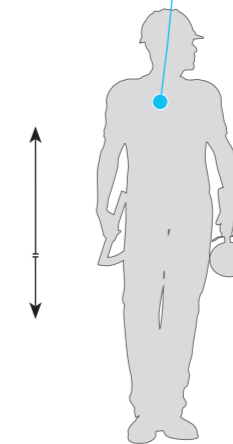
USE OF TRIPOD WITH LIFTING DEVICE TO LIFT/LOWER A WORKER.



USE OF TRIPOD AND RETRACTABLE TYPE FALL ARRESTER WITH RESCUE LIFTING DEVICE FUNCTION TO SAFEGUARD A WORKER (WITH POSSIBILITY OF INSTANT EVACUATION).



no limitations  
max. 2 m



# REVIEW OF TRIPODS AND WINCHES

|                     |                 | TM 1 | TM 6    | TM 6-T | TM 7    | TM 7-T | TM 9 | TM 9-L | TM 9-T | TM 9-W  | TM 11-T2 | TM 12   | TM 12-2 | TM 13 | TM 13-T | TM 14-SB<br>TM 14-ZSE | ACCESSORIES  | WINCH TYPE       |
|---------------------|-----------------|------|---------|--------|---------|--------|------|--------|--------|---------|----------|---------|---------|-------|---------|-----------------------|--------------|------------------|
| RUP 502             | RUP 502         | ✓    |         |        |         |        | ✓    | ✓      |        | ✓       |          |         |         |       |         |                       | PL 101 + SDW | rescue 140 kg    |
|                     | RUP 502-A       |      | ✓       |        |         |        |      |        |        |         | ✓        | ✓       | ✓       |       |         | ✓                     | SDW          | rescue 140 kg    |
|                     | RUP 502-AT      |      |         | ✓      |         |        |      |        |        |         | ✓        | ✓       | ✓       |       | ✓       |                       | -            | material 500 kg  |
|                     | RUP 502-B       |      |         |        | ✓       |        |      |        |        |         |          |         |         |       |         |                       | PL 101 + SDW | rescue 140 kg    |
|                     | RUP 502-BT      |      |         |        |         | ✓      |      |        |        |         |          |         |         |       |         |                       | PL 101       | material 500 kg  |
|                     | RUP 502-T       |      |         |        |         |        |      |        | ✓      |         |          |         |         |       |         |                       | PL 101       | material 500 kg  |
| RUP 503             | RUP 503         |      | ✓       |        |         |        |      |        |        |         |          | ✓       | ✓       | ✓     |         | ✓                     | SDW          | rescue 200 kg    |
|                     | RUP 503-B       |      |         |        | ✓       |        |      |        |        |         |          |         |         |       |         |                       | PL 101 + SDW | rescue 200 kg    |
|                     | RUP 503-BT      |      |         |        |         | ✓      |      |        |        |         |          |         |         |       |         |                       | PL 101       | material 1000 kg |
|                     | RUP 503-T       |      |         | ✓      |         |        |      |        |        |         |          | ✓       | ✓       |       | ✓       |                       | -            | material 1000 kg |
| RUP 505             | RUP 505         |      |         |        |         |        | ✓    | ✓      |        | ✓       |          |         |         |       |         |                       | PL 101 + SDW | rescue 150 kg    |
|                     | RUP 505-A       |      |         |        |         |        |      |        |        |         |          |         |         | ✓     |         |                       | SDW          | rescue 240 kg    |
| CRW 200             | CRW 200 + AT173 |      |         |        |         |        | ✓    | ✓      |        | ✓       |          |         |         |       |         |                       | PL 101       | rescue 140 kg    |
|                     | CRW 200 + AT174 |      | ✓       |        |         |        |      |        |        |         | ✓        | ✓       | ✓       |       |         | ✓                     | -            | rescue 140 kg    |
|                     | CRW 200 + AZ017 |      | ✓       |        | ✓       |        | ✓    | ✓      |        |         | ✓        | ✓       | ✓       |       |         |                       | -            | rescue 140 kg    |
| CRW 300             | CRW 300 + AT171 | ✓    |         |        |         |        | ✓    | ✓      |        | ✓       |          |         |         |       |         |                       | -            | rescue 140 kg    |
|                     | CRW 300 + AT172 |      | ✓       |        |         |        |      |        |        |         | ✓        | ✓       | ✓       |       |         | ✓                     | -            | rescue 140 kg    |
|                     | CRW 300 + AZ017 |      | ✓       |        | ✓       |        | ✓    | ✓      |        |         | ✓        | ✓       | ✓       |       |         |                       | -            | rescue 140 kg    |
| MAX NUMBER OF USERS | 2               | 2    | -       | 1      | -       | 1      | 1    | -      | 1      | -       | 2        | 2       | 2       | -     | 2       |                       |              |                  |
| MAX LOAD WEIGHT     | -               | -    | 1000 kg | -      | 1000 kg | -      | -    | 500 kg | -      | 1000 kg | 1000 kg  | 1000 kg | 1000 kg | -     | 1000 kg | -                     |              |                  |

## TRIPODS

| Personal 1 person | Personal 2 persons | Material max 500 kg | Material max 1000 kg | Personal and material max. 1000 kg or 2 persons |
|-------------------|--------------------|---------------------|----------------------|---|
| TM 7              | TM 1               | TM 9-T              | TM 6-T               | TM 12   |
| TM 9              | TM 6               |                     | TM 7-T               | TM 12-2   |
| TM 9-L            | TM 13              |                     | TM 13-T              |   |
| TM 9-W            | TM 14 (SB and ZSE) |                     | TM 11-T2             |   |

## LIFTING DEVICES

| Rescue up to 140 kg    | Rescue up to 200 kg      | Material max. 500 kg | Material max. 1000 kg | Fall arrester max. 140 kg |
|------------------------|--------------------------|----------------------|-----------------------|---------------------------|
| RUP 502                | RUP 503                  | RUP 502-T            | RUP 503-T             | CRW 200                   |
| RUP 502-A              | RUP 503-B                | RUP 502-AT           | RUP 503-BT            | CRW 300                   |
| RUP 502-B              | RUP 505-A (up to 240 KG) | RUP 502-BT           |                       |                           |
| RUP 505 (up to 150 KG) |                          |                      |                       |                           |

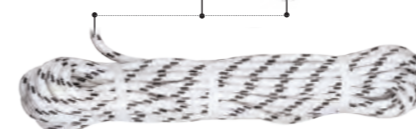
## ACCESSORIES

|                      |               |               |               |                 |                                   |
|----------------------|---------------|---------------|---------------|-----------------|-----------------------------------|
| Rope guide AT015-400 | Pulley PL 101 | Pulley PL 415 | Pulley PL 416 | Spring absorber | Leg strap for transport AT011-500 |
|----------------------|---------------|---------------|---------------|-----------------|-----------------------------------|



Rope for lifting device RUP 505 and RUP 505-A

Figure-of-nine loop  
Thimble-eye



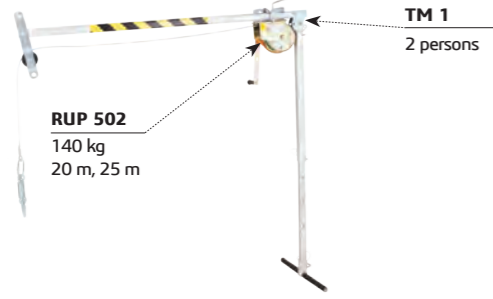
2 types of work rope terminations are recommended, using figure-of-nine loop to be used with tripods **TM 9** and **TM 9-W**, and thimble-eye with tripods **TM 9**, **TM 9-W** and **TM 13**.

**AT011-500**  
For tripods:  
TM 7, TM 7-T, TM 9, TM 9-T, TM 9-L, TM 9-W

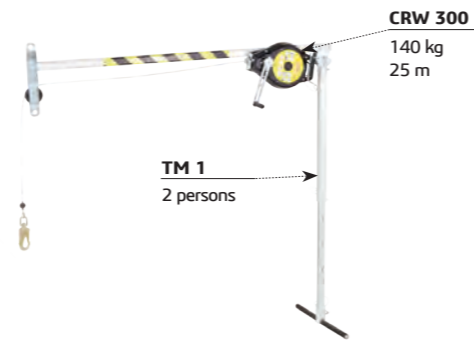
**AT015-500**  
For tripods:  
TM 11-T2, TM 13, TM 13-T



**TM 1 + RUP 502**



**TM 1 + CRW 300**



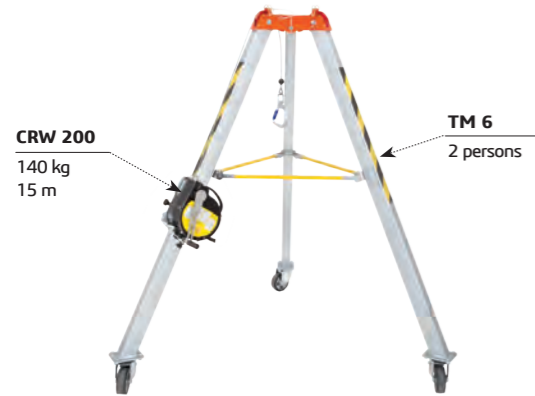
**TM 6 + RUP 502-A**



**TM 6 + RUP 503**



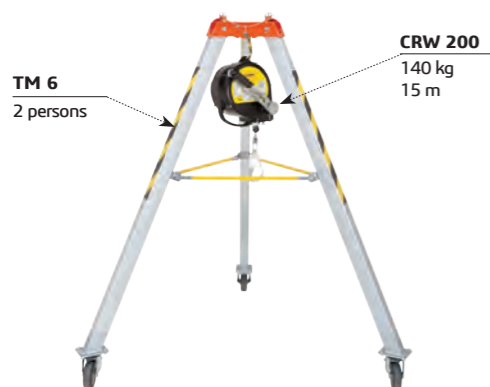
**TM 6 + CRW 200 + AT174**



**TM 6 + CRW 300 + AT172**



**TM 6 + CRW 200 + AZ017**



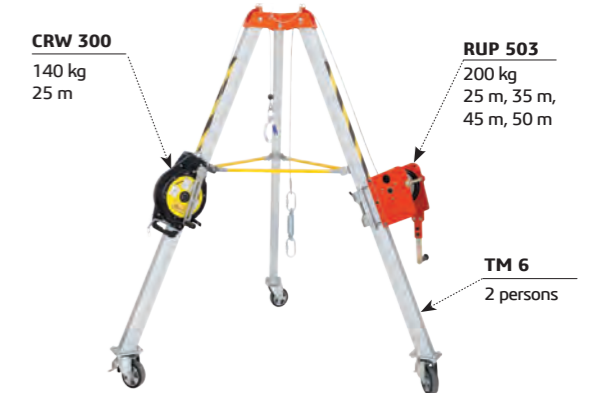
**TM 6 + CRW 300 + AZ017**



**TM 6 + RUP 502-A + CRW 300 + AT172**



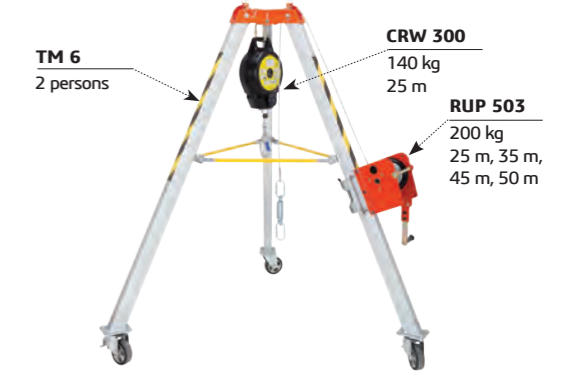
**TM 6 + RUP 503 + CRW 300 + AT172**



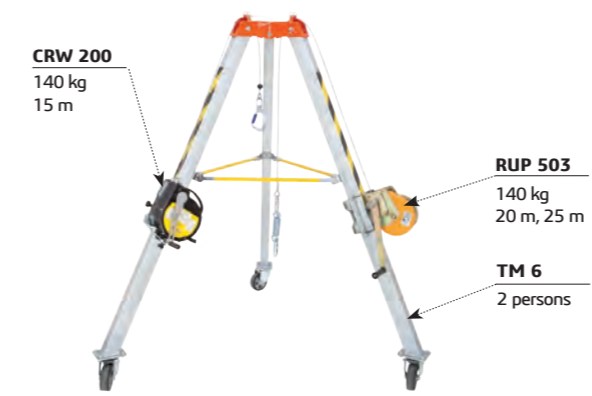
**TM 6 + RUP502-A + CRW 300 + AZ017**



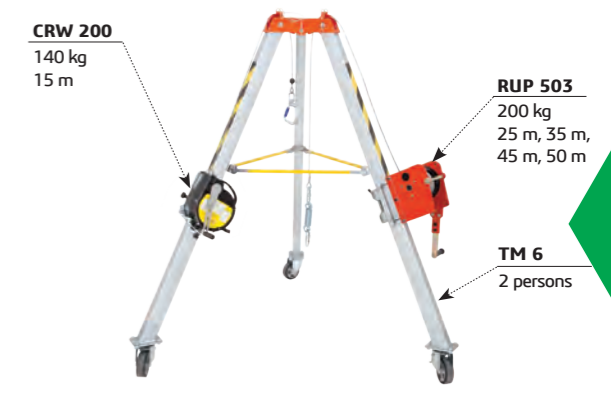
**TM 6 + RUP 503 + CRW 300 + AZ017**



**TM 6 + RUP 502-A + CRW 200 + AT174**



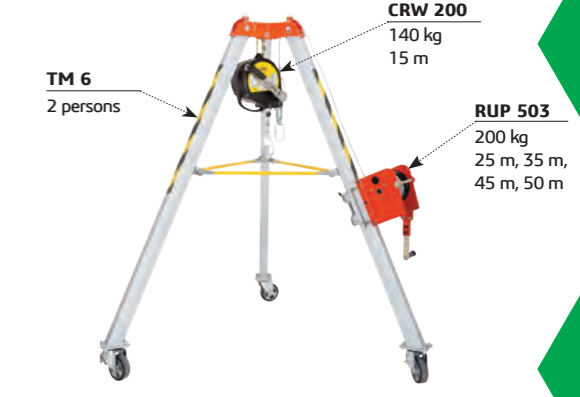
**TM 6 + RUP 503 + CRW 200 + AT174**



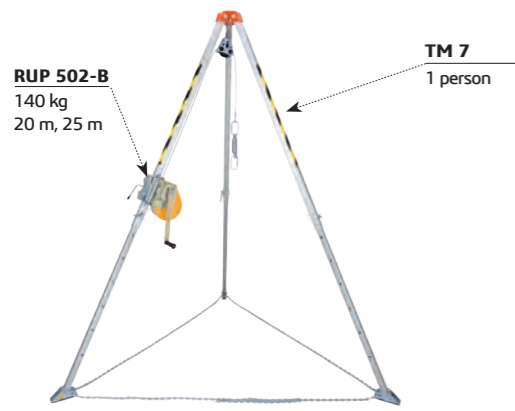
**TM 6 + RUP 502-A + CRW 200 + AZ017**



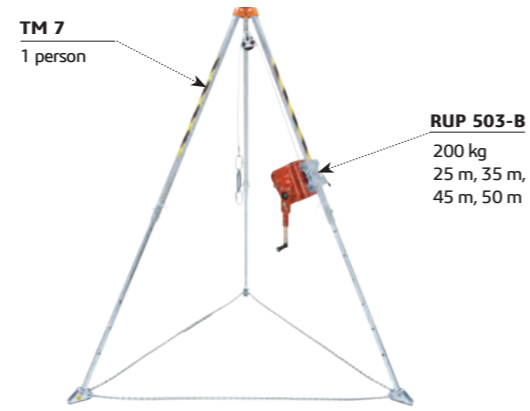
**TM 6 + RUP 503 + CRW 200 + AZ017**



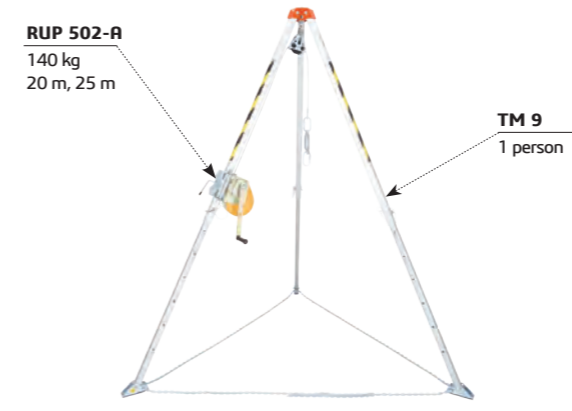
**TM 7 + RUP 502-B**



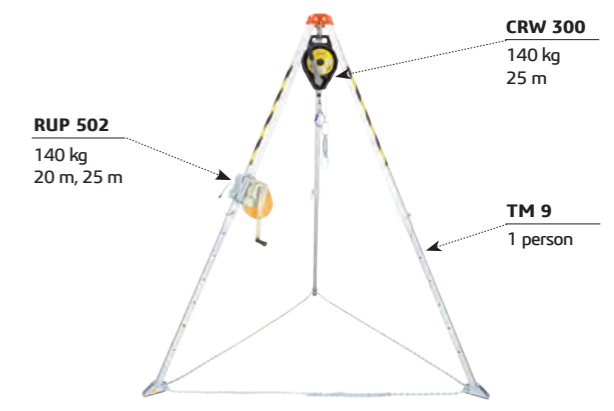
**TM 7 + RUP 503-B**



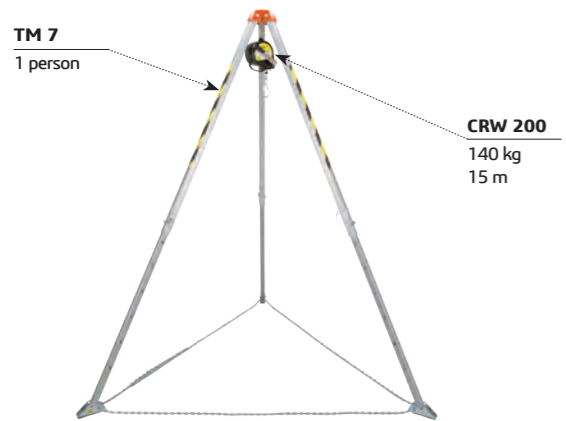
**TM 9 + RUP 502**



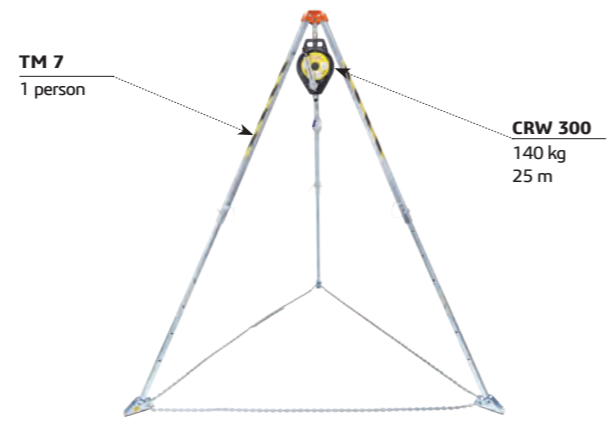
**TM 9 + RUP 502 + CRW 300 + AZ017**



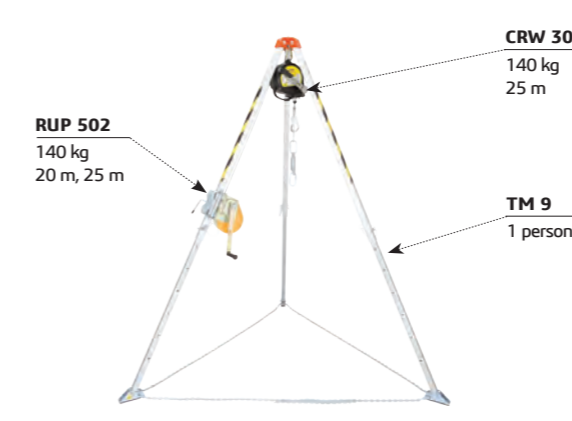
**TM 7 + CRW 200 + AZ017**



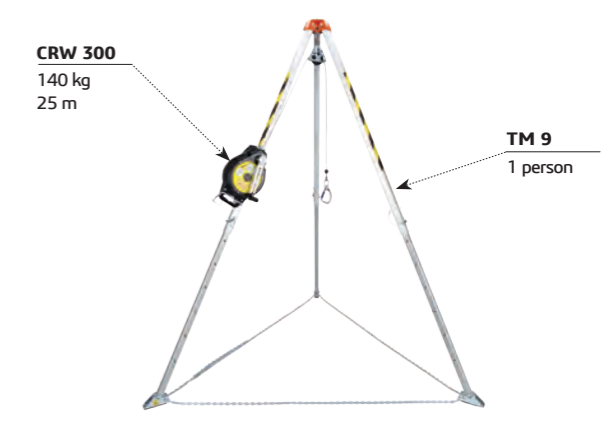
**TM 7 + CRW 300 + AZ017**



**TM 9 + RUP 502 + CRW 200 + AZ017**



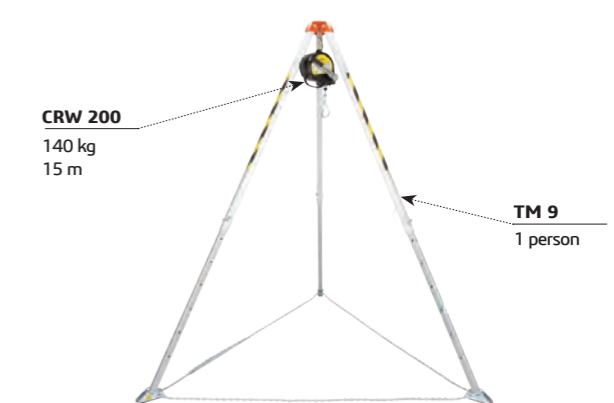
**TM 9 + CRW 300 + AT171**



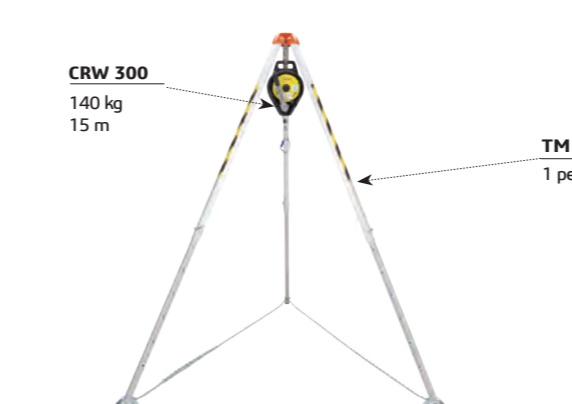
**TM 9 + CRW 200 + AT173**



**TM 9 + CRW 200 + AZ017**



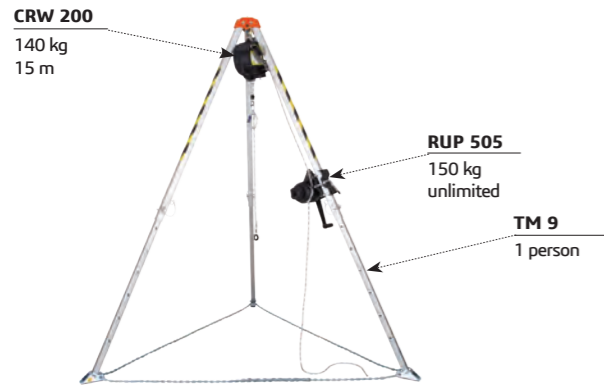
**TM 9 + CRW 300 + AZ017**



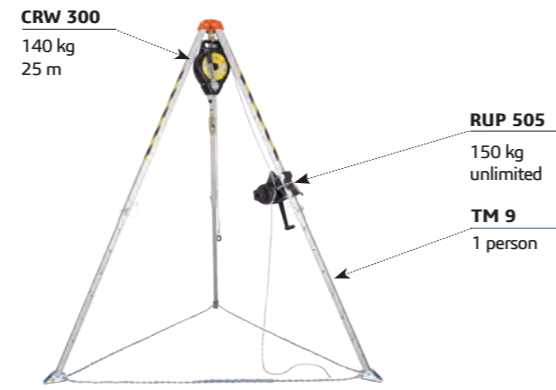
**TM 9 + RUP 505**



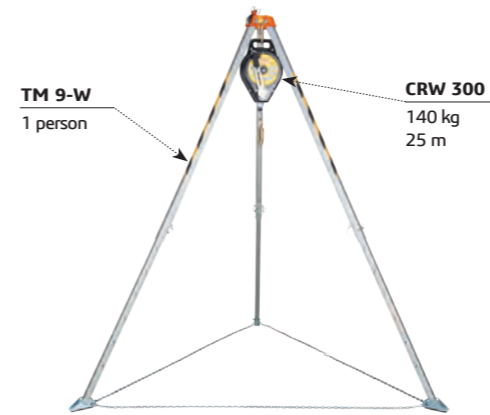
**TM 9 + RUP 505 + CRW 200 + AZ 017**



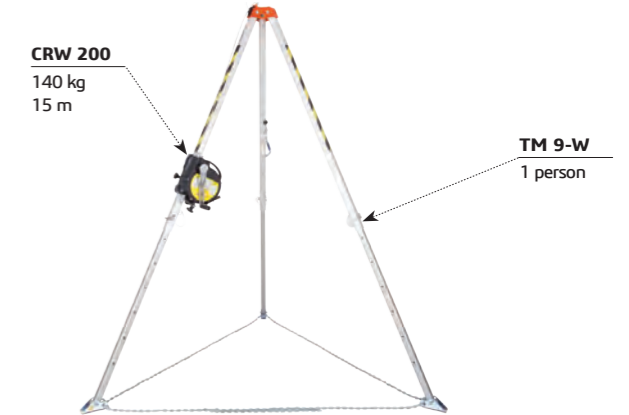
**TM9 + RUP 505 + CRW 300 + AZ017**



**TM 9-W + CRW 300 + AZ017**



**TM 9-W + CRW 200 + AT173**



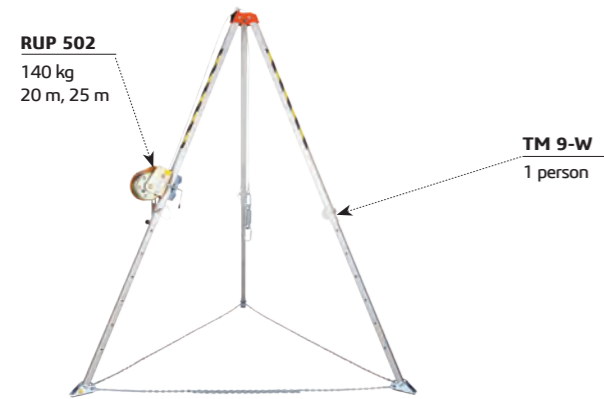
**TM 9-W + CRW 300 + AT171**



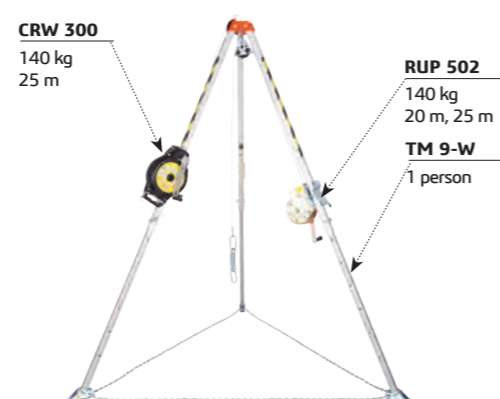
**TM 9-W + RUP 505**



**TM 9-W + RUP 502**



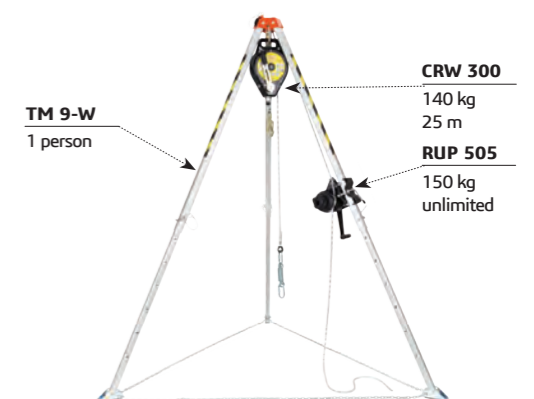
**TM 9-W + RUP 502 + AT171 + CRW 300**



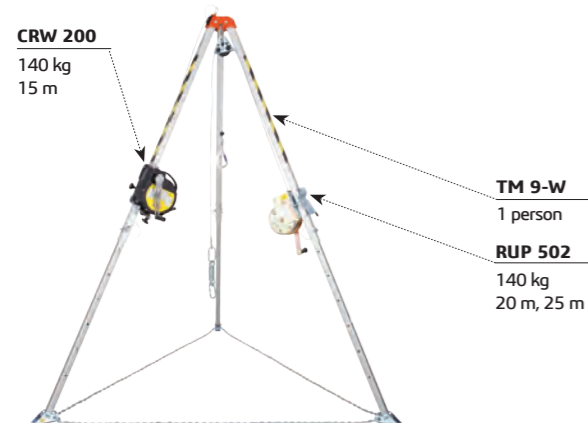
**TM 9-W + RUP 505 + CRW 200**



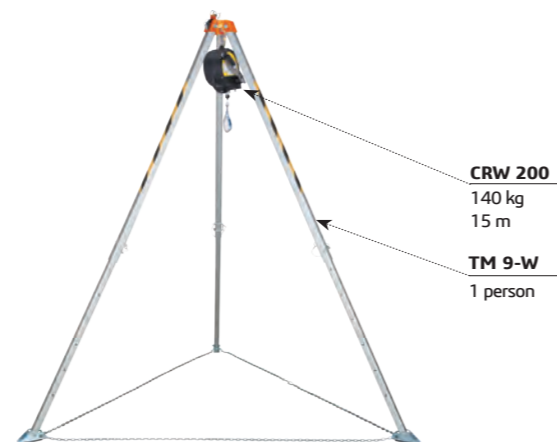
**TM 9-W + RUP 505 + CRW 300**



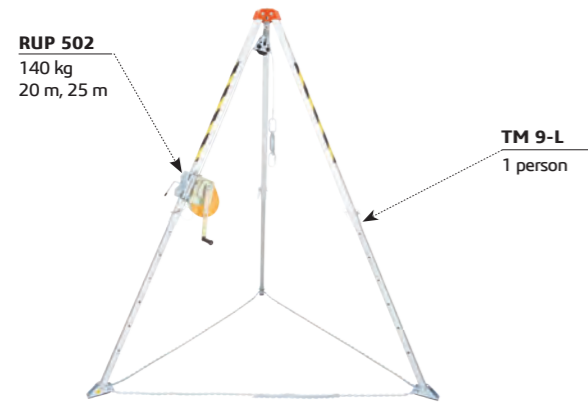
**TM 9-W + RUP 502 + CRW 200 + AT173**



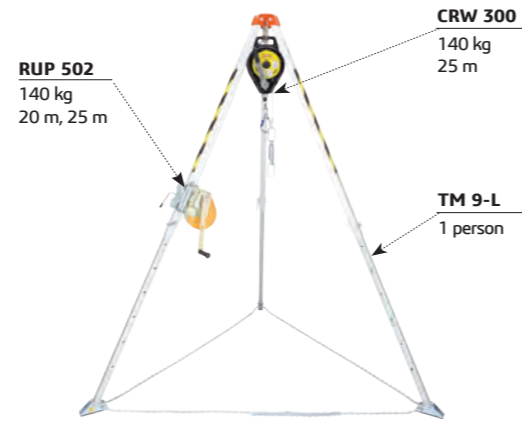
**TM 9-W + CRW 200 + AZ017**



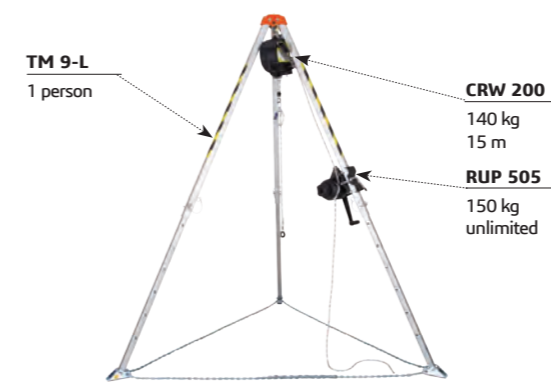
**TM 9-L + RUP 502**



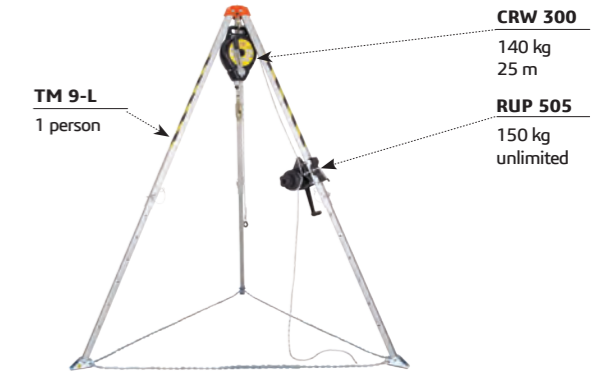
**TM 9-L + RUP 502 + CRW 300 + AZ017**



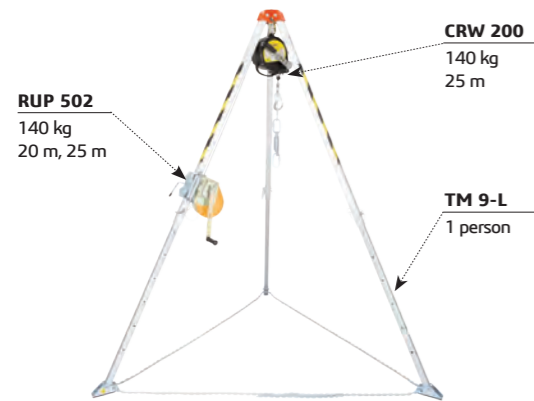
**TM 9-L + RUP 505 + CRW 200 + AZ 017**



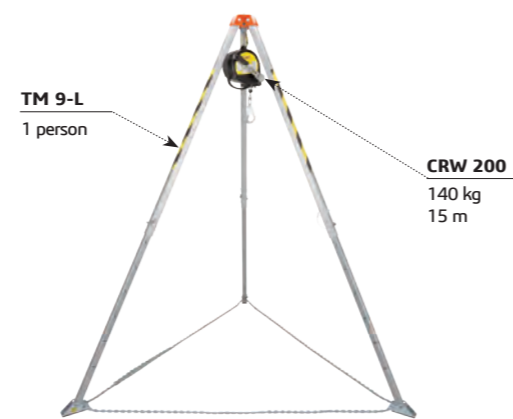
**TM 9-L + RUP 505 + CRW 300 + AZ017**



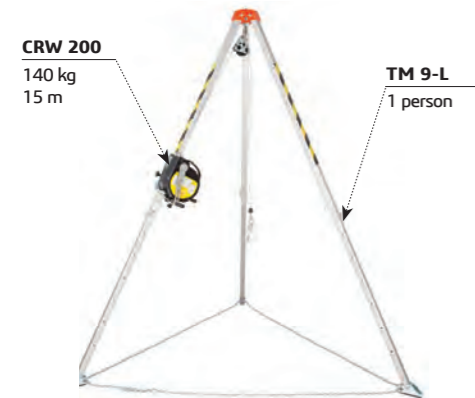
**TM 9-L + RUP 502 + CRW 200 + AZ017**



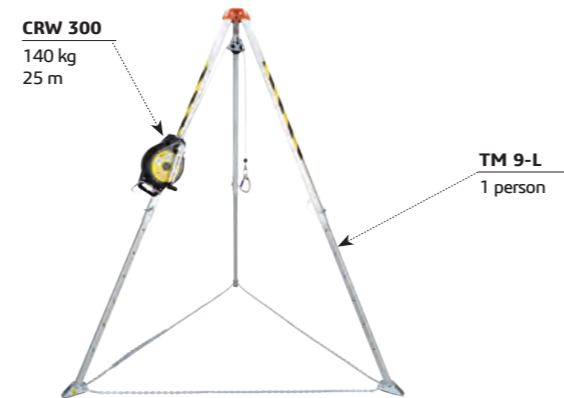
**TM 9-L + CRW 200 + AZ017**



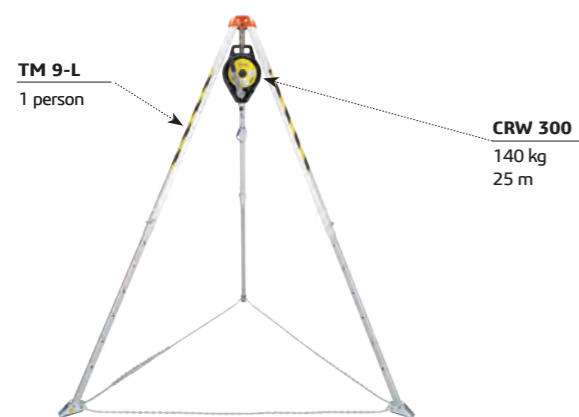
**TM 9-L + CRW 200 + AT173**



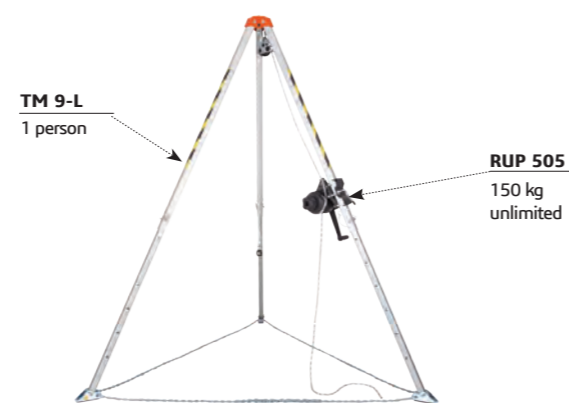
**TM 9-L + CRW 300 + AT171**



**TM 9-L + CRW 300 + AZ017**



**TM 9-L + RUP 505**



**TM 12 + RUP 502-A**



**TM 12 + RUP 503**



**TM 12 + RUP 503 + CRW 300 + AZ017**



**TM 12 + RUP 503 + CRW 200 + AZ017**



**TM 12 + CRW 200 + AZ017**



**TM 12 + CRW 300 + AZ017**



**TM 12 + CRW 300 + AT172**



**TM 12 + CRW 200 + AT174**



**TM 12 + RUP 502-A + CRW 200 + AZ017**



**TM 12 + RUP 502-A + CRW 300 + AZ017**



**TM 12-2 + RUP 502-A**



**TM 12-2 + RUP 503**



**TM 12-2 + RUP 502-A + AT172 + CRW 300**



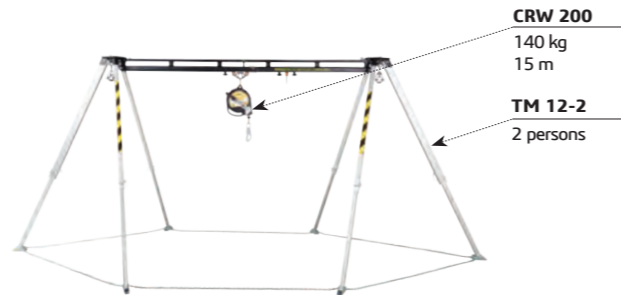
**TM 12-2 + RUP 503 + CRW 300 + AZ017**



**TM 12-2 + CRW 200 + AT174**



**TM 12-2 + CRW 200 + AZ017**



**TM 12-2 + RUP 503 + CRW 300 + AT172**



**TM 12-2 + RUP 503 + CRW 200 + AZ017**



**TM 12-2 + CRW 300 + AT172**



**TM 12-2 + CRW 300 + AZ017**



**TM 12-2 + RUP 503 + CRW 200 + AT174**



**TM 12-2 + RUP 502-A + CRW 200 + AT174**



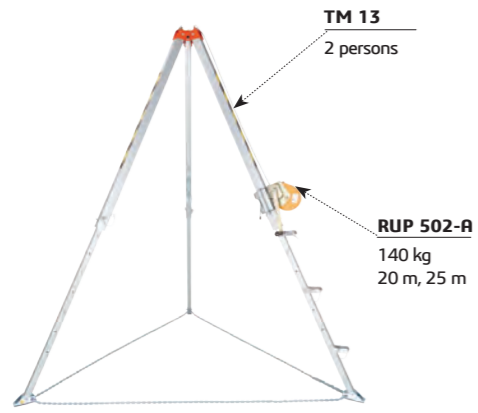
**TM 12-2 + RUP 502-A + CRW 300 + AZ017**



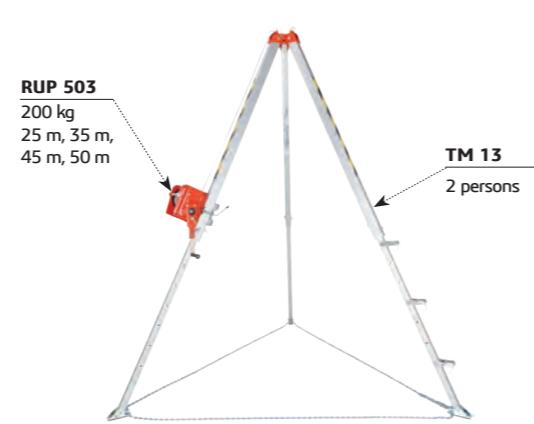
**TM 12-2 + RUP 502-A + CRW 200 + AZ017**



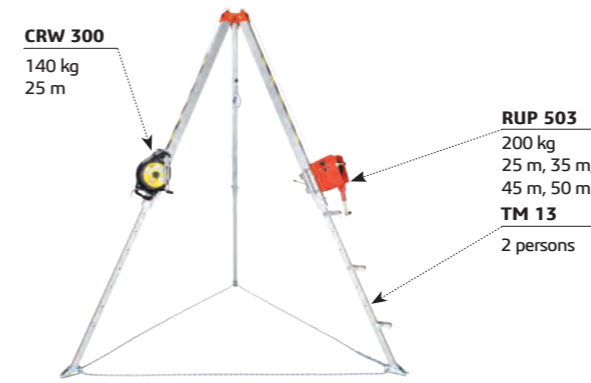
TM 13 + RUP 502-A



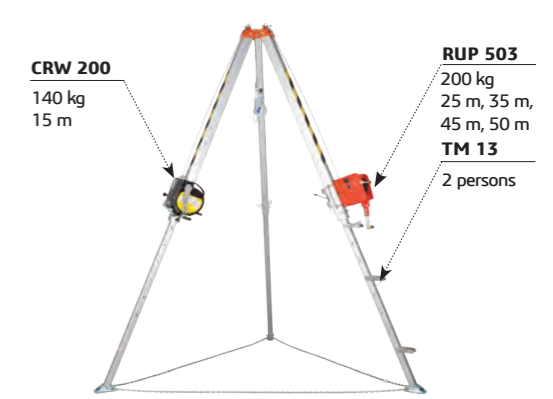
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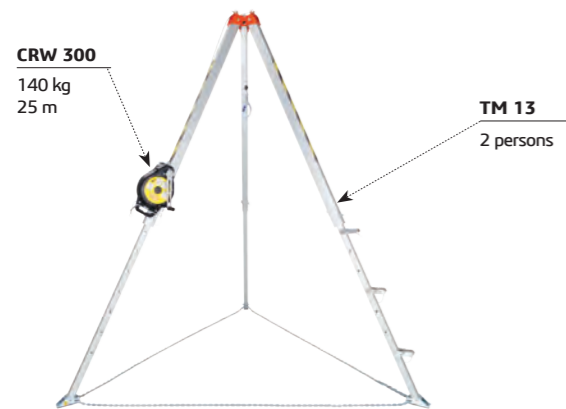
TM 13 + RUP 503 + CRW 300 + AT172



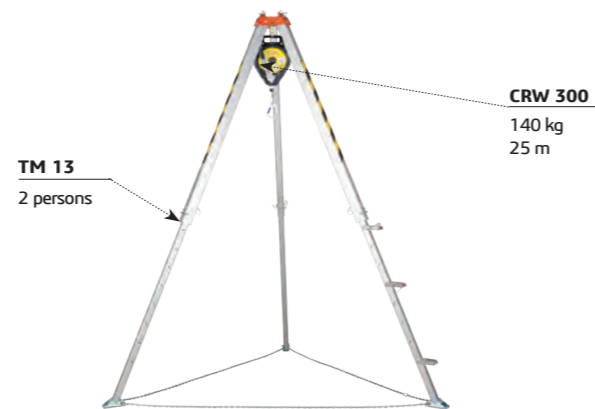
TM 13 + RUP 503 + CRW 200 + AT174



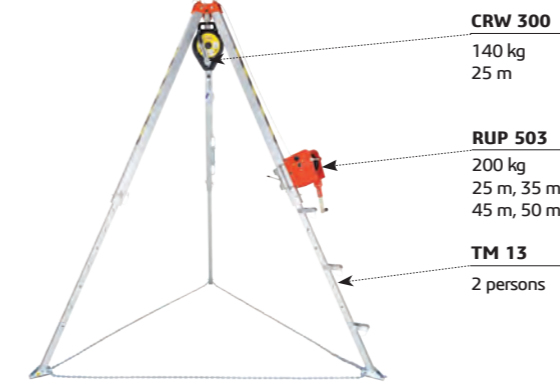
TM 13 + CRW 300 + AT172



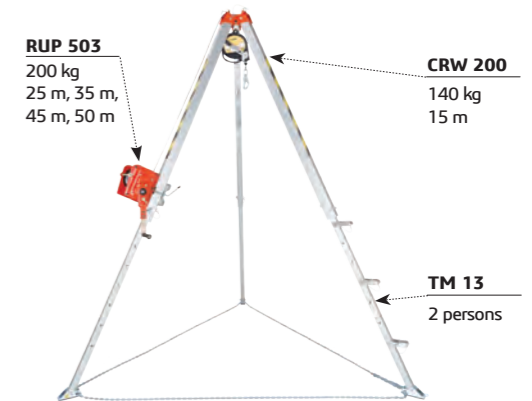
TM 13 + CRW 300 + AZ017



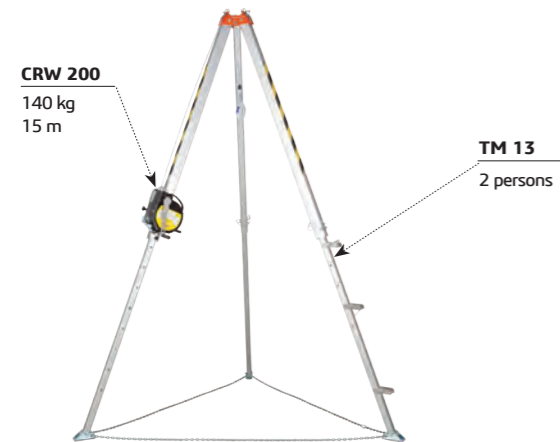
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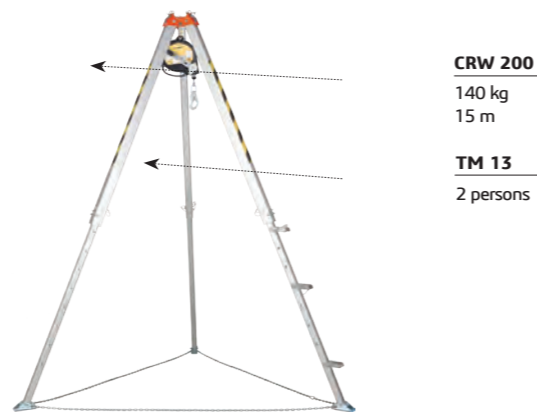
TM 13 + RUP 503 + CRW 200 + AZ017



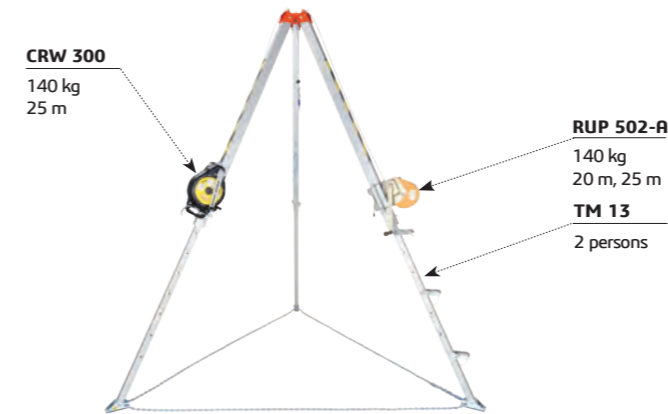
TM 13 + CRW 200 + AT174



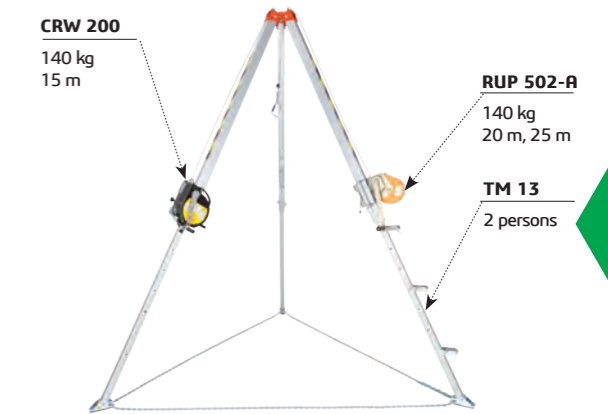
TM 13 + CRW 200 + AZ017



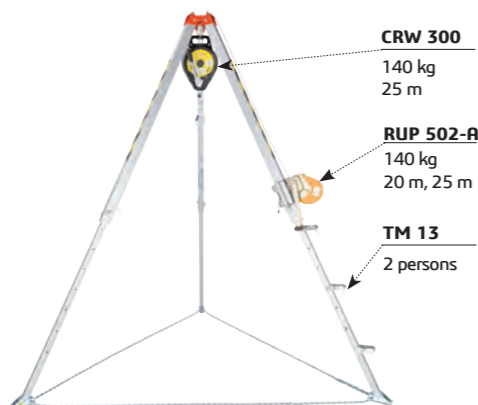
TM 13 + RUP 502-A + CRW 300 + AT172



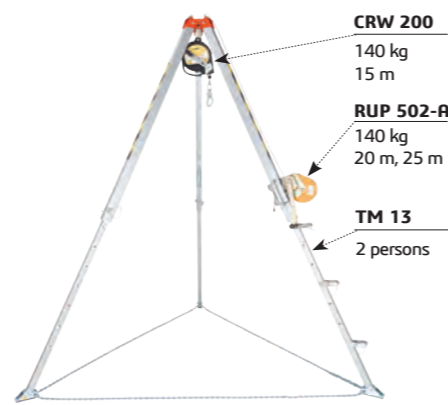
TM 13 + RUP 502-A + CRW 200 + AT174



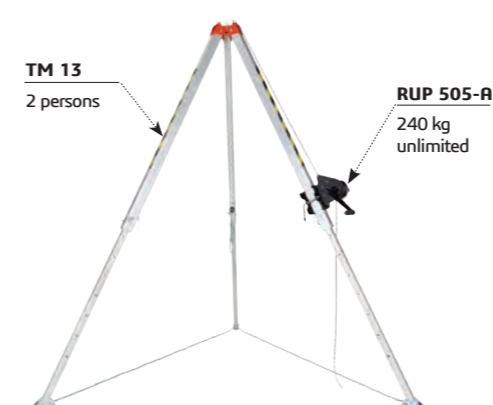
TM 13 + RUP 502-A + CRW 300 + AZ017



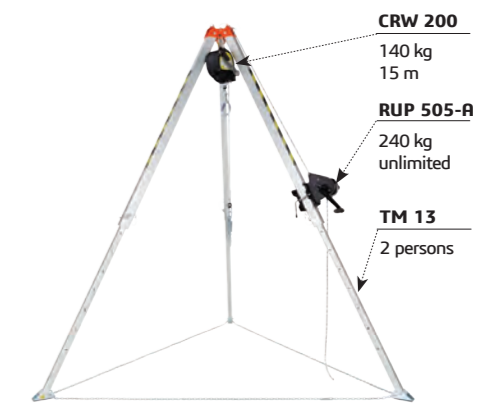
TM 13 + RUP 502-A + CRW 200 + AZ017



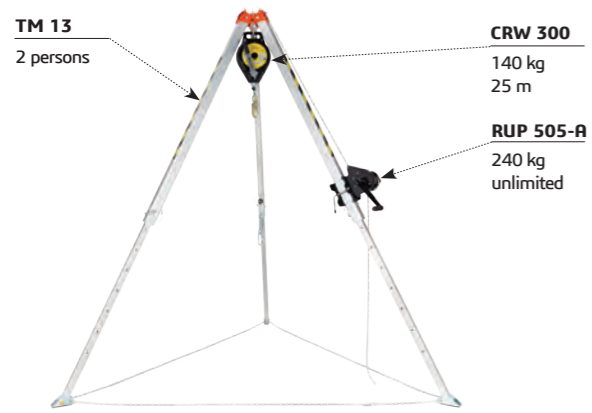
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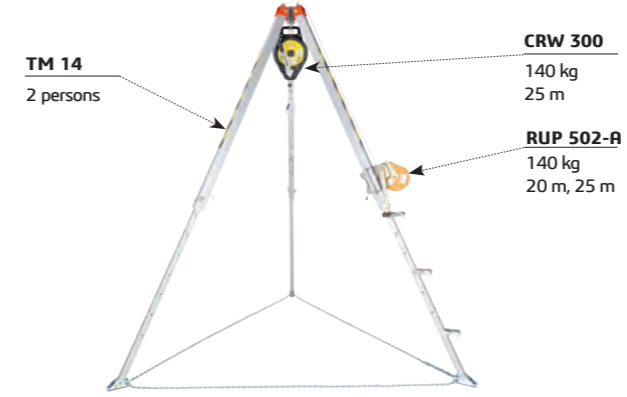
TM 13 + RUP 505-A + CRW 200 + AZ017



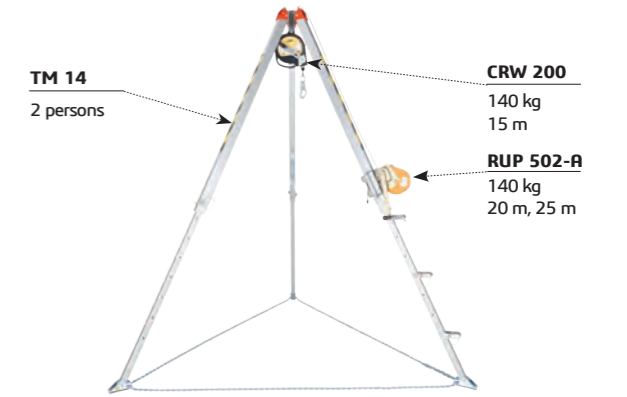
**TM 13 + RUP 505-A + CRW300 + AZ017**



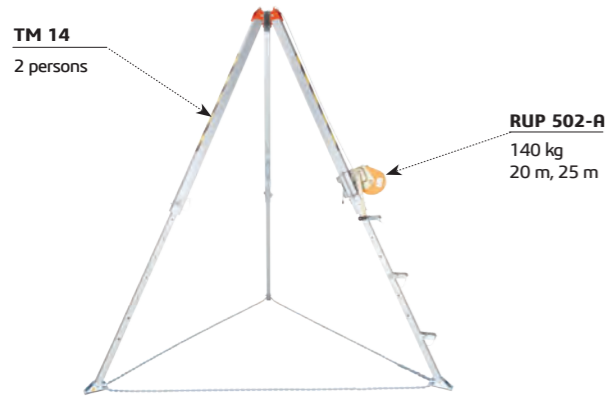
**TM 14 + RUP 502-A + CRW 300 + AZ017**



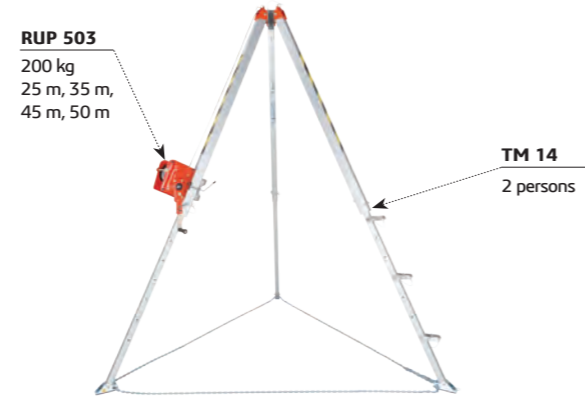
**TM 14 + RUP 502-A + CRW 200 + AZ017**



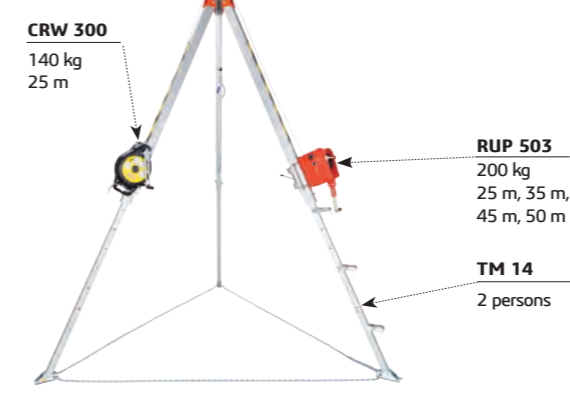
**TM 14 + RUP 502-A**



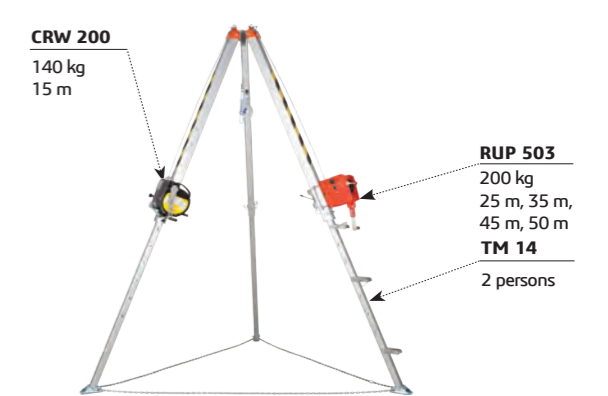
**TM 14 + RUP 503**



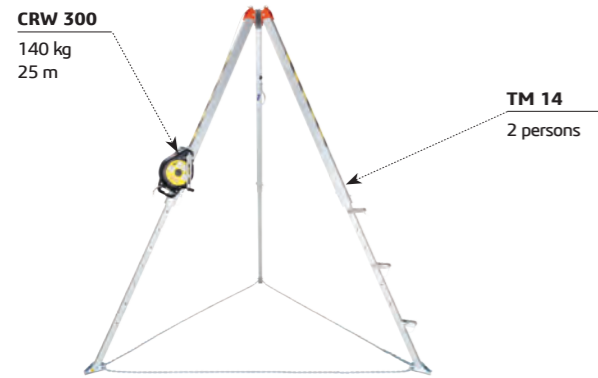
**TM 14 + RUP 503 + CRW 300 + AT172**



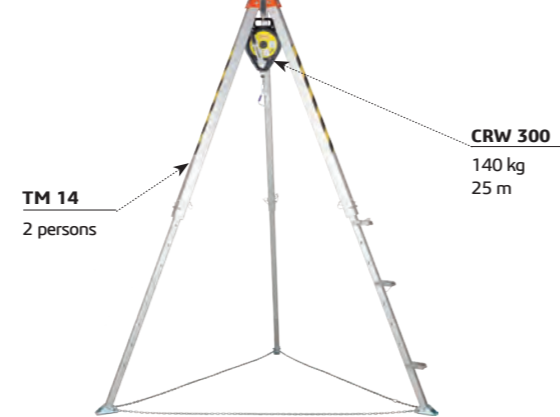
**TM 14 + RUP 503 + CRW 200 + AT174**



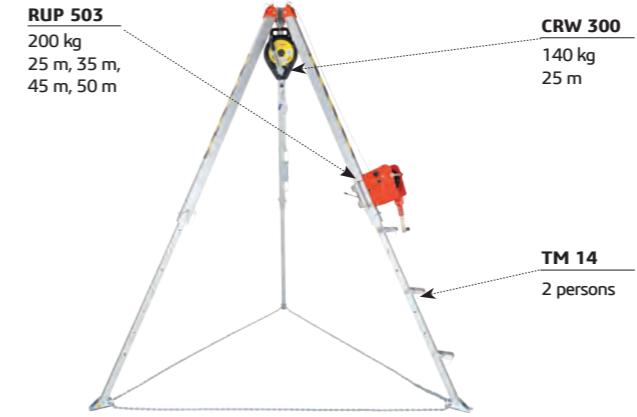
**TM 14 + CRW 300 + AT172**



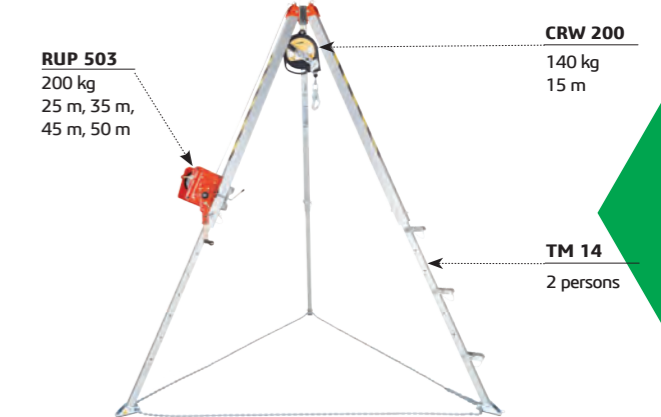
**TM 14 + CRW 300 + AZ017**



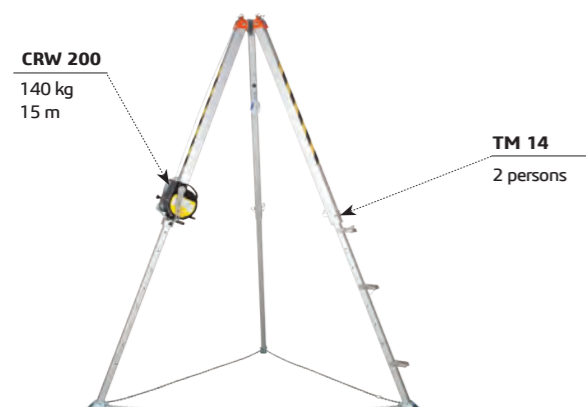
**TM 14 + RUP 503 + CRW 300 + AZ017**



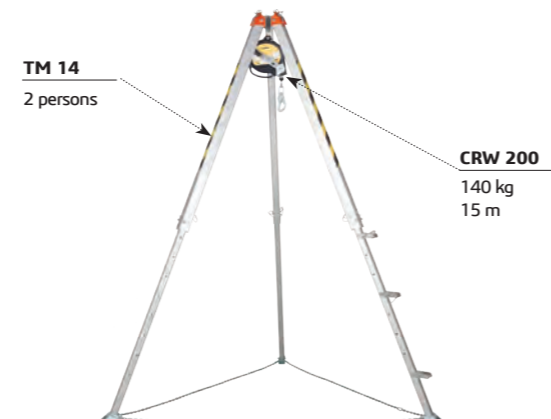
**TM 14 + RUP 503 + CRW 200 + AZ017**



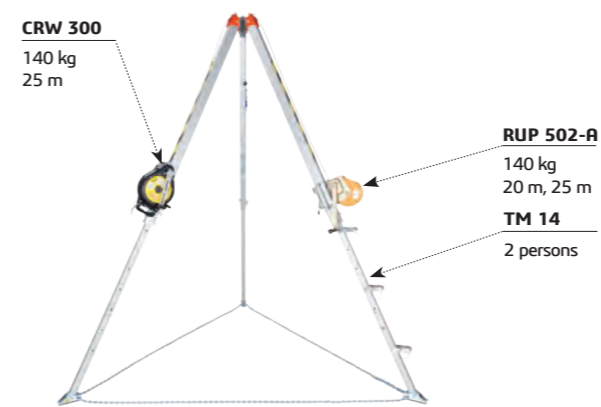
**TM 14 + CRW 200 + AT174**



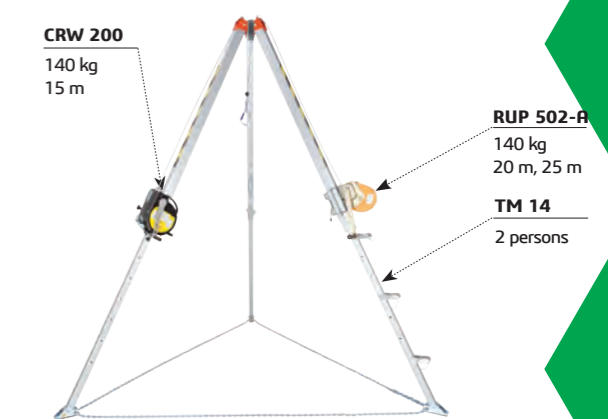
**TM 14 + CRW 200 + AZ017**



**TM 14 + RUP 502-A + CRW 300 + AT172**



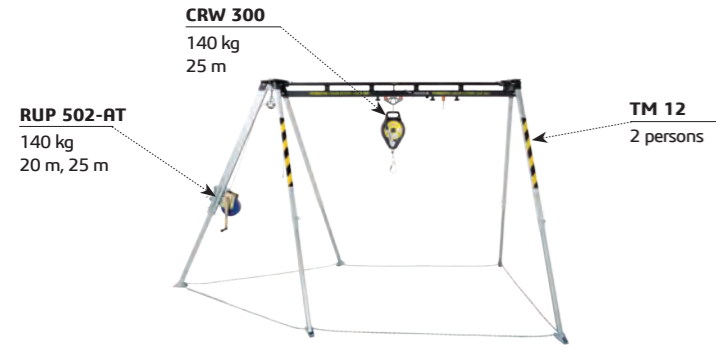
**TM 14 + RUP 502-A + CRW 200 + AT174**







**TM 12 + RUP 502-AT + CRW 300 + AZ017**



**TM 12 + RUP 503-T + CRW 300 + AZ017**



**TM 12-2 + RUP 502-AT + CRW 300 + AT172**



**TM 12-2 + RUP 503-T + CRW 200 + AT174**



**TM 12 + CRW 300 + AT172**



**TM 12 + CRW 300 + AZ017**



**TM 12-2 + RUP 503-T + CRW 300 + AZ017**



**TM 12-2 + RUP 503-T + CRW 200 + AZ017**



**TM 12-2 + RUP 502-AT + CRW 300 + AT172**



**TM 12-2 + RUP 503-T + CRW 200 + AZ017**





**TM 6-T + RUP 502-AT**



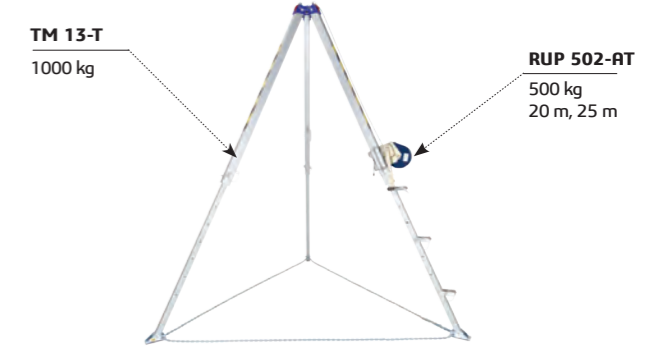
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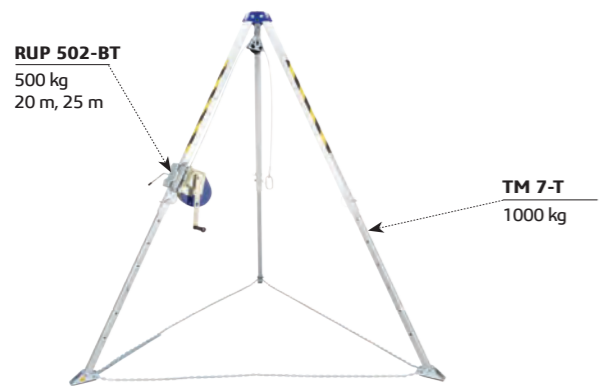
**TM 12-2 + RUP 503-T**



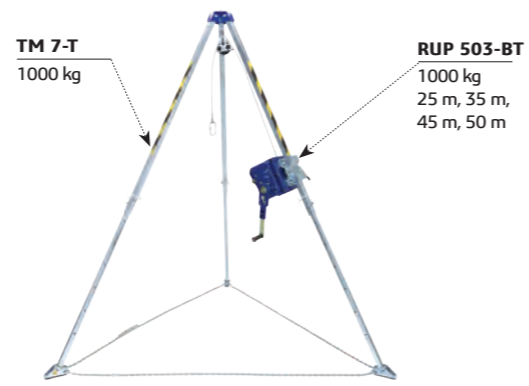
**TM 13-T + RUP 502-AT**



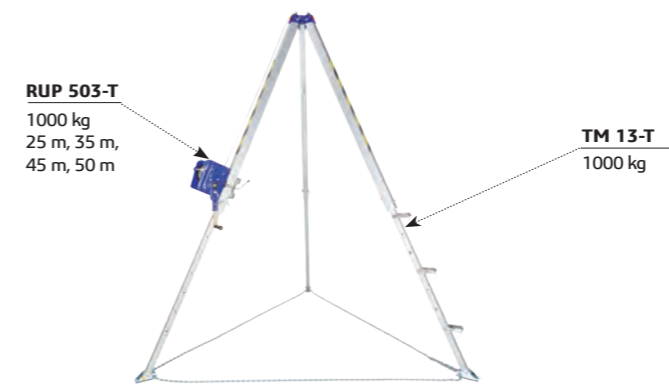
**TM 7-T + RUP 502-BT**



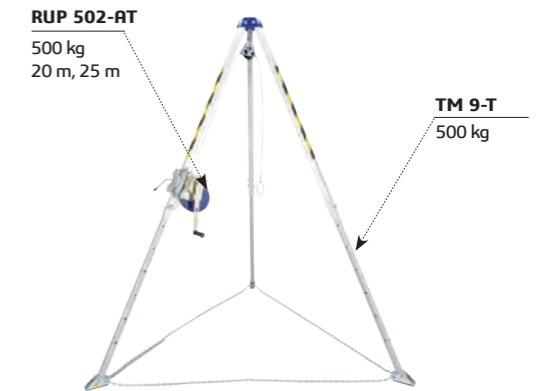
**TM 7-T + RUP 503-BT**



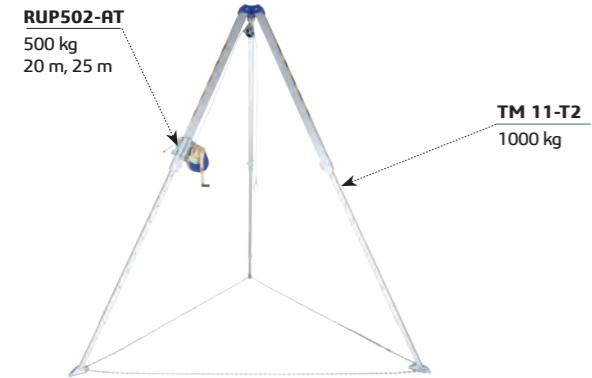
**TM 13-T + RUP 503-T**



**TM 9-T + RUP 502-AT**



**TM 11-T2 + RUP 502-AT**



**TM 12 + RUP 502-AT**



**TM 12 + RUP 503-T**



**TM 12-2 + RUP 502-AT**



