

# **USE AND INSTALLATION MANUAL**

edition: 1/05.10.2020

# TM 9-N SAFETY TRIPOD

EN 795/B TS 16415/B

Notified body which supervises the production of the equipment APAVE SUDEUROPE SAS - BP 193 - 13322 MARSEILLE CEDEX 16 – FRANCE



Figure 1 – General view of device

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#### 1. GENERAL DESCRIPTION

Safety tripod TM9-N is an anchor point compliant with EN 795/B and document TS 16415/B and can be used as a component of fall protection equipment.

Tripod TM9-N provides protection for up to 3 users at a time.

Tripod TM9-N is composed of powder-coated aluminium head, equipped with 3 polyamide rollers with bearings (for work rope guidance in rescue devices CRW200 / RUP502-U / RUP504 / RUP506). The head is fitted with 3 anchor points located at its side walls. Each of these points can be used as an anchor point for fall protection equipment. One point is designed to be used by maximum one user at a time.

The above mentioned rescue devices can be mounted on each of three aluminium telescopic legs by means of universal holder UTB (AT017-300). Each telescopic leg is terminated with a foot made of zinc-plated steel, equipped with rubber pad. Each foot has teeth which penetrate through loose or slippery ground (soil, sand, grit, ice, snow). Inner leg is locked in outer leg using automatic pin with locking fins which are released by button in pin holder.

Basic parameters of device:

- Maximum height "under head": 2.10m
- Minimum height "under head": 1.53m
- Range of diameters above which tripod can be unfolded: 1.0...1.4m.

#### 2. LOAD LIMIT AND STRENGTH

a) **GENERAL INFORMATION** 

Minimum Breaking Strength (MBS): 15kN.

The device can be loaded vertically downwards within a space limited by legs of the device.

The maximum load that could be transmitted in service from the device to the static construction -10 kN.

If the device is used as a part of a fall arrest system, the user must be equipped with an element limiting maximum dynamic forces applied on user while arresting a fall to max. 6kN.

 b) FOR MATERIAL TRIPODS installed on the tripod head and/or leg using universal holder UTB (AT017-300):

Working Load Limit (WLL): 500kg Safety Factor (SF): 3:1.

#### c) FOR PERSONAL PROTECTIVE EQUIPMENT (PPE) mounted to anchor points located on the head:

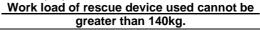
Maximum 3 users at the same time. Whereas one user is connected to one anchor point.

According to the requirements of EN 795/B and document TS 16415/B strength of the device is min. 14kN

 d) FOR PERSONNEL RESCUE DEVICES installed on tripod leg with use of universal holder UTB (AT017-300):

Working Load Limit (WLL): 140kg

Safety Factor (SF): 10:1.



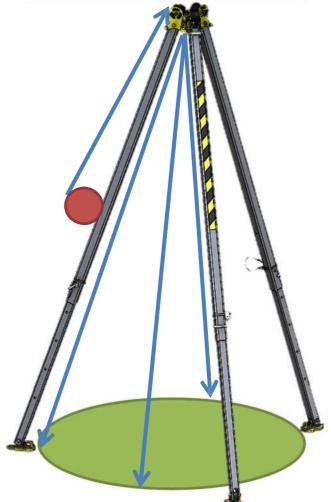


Figure 2 – Permissible directions of loading of anchor point within inner area determined by tripod legs



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#### 3. TRANSPORT AND WEIGHT

Weight of complete device: 15.45kg.

Personal fall protection equipment must be transported in a package (e.g.: bag made of moisture-proof textile or foil bag or cases made of steel or plastic) to protect it against damage or moisture.

#### 4. MAINTENANCE AND STORAGE

Personal protective equipment should be cleaned without causing adverse effect on the materials used in the manufacture of the equipment. For textile materials (webbings, ropes) use agents suitable for delicate fabrics. Can be washed in hands or in a washing machine. Rinse thoroughly. Wash textile elements with water only.

- When the equipment becomes wet, either from being in use or after cleaning, allow it to dry naturally, and keep it away from sources of heat. In metallic products slightly lubricate some mechanical parts (springs, hinges, pawls, etc.) on a regular base to ensure their better operation.

Personal fall protection equipment should be stored loosely packed in well-ventilated rooms, protected from light, UV degradation, dust, sharp edges, extreme temperatures and aggressive chemical substances.

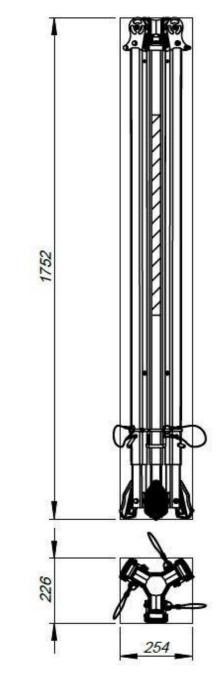


Figure 3 – Transport dimensions



#### 5. GENERAL DIMENSIONS

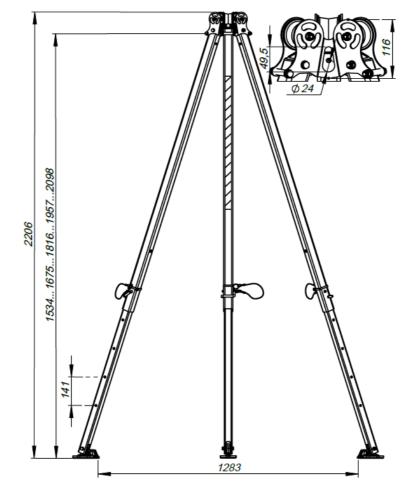


Figure 4 – General dimensions of device – front view

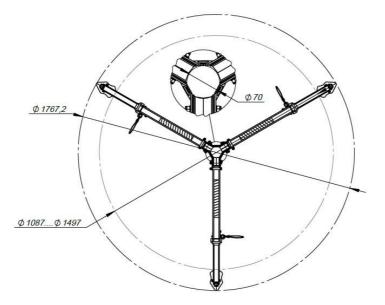


Figure 5 – General dimensions of device – bottom view



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#### 6. TIME OF USAGE

Maximum time of usage of correctly operating devices is unlimited.

The device must be withdrawn from use immediately and destroyed if it has been used to arrest a fall or there are any doubts concerning its function.

**NOTE:** Maximum time of usage of the device depends on intensity and environment of use. If the device is used in heavy conditions, being exposed to frequent contact with water, sharp edges, corrosive substances, extreme of temperatures, it may be necessary to withdraw the device after only one use.

#### 7. PERIODIC INSPECTIONS

At least once a year, after every 12 months of use, it is necessary to carry out periodic detailed inspection of the device.

Periodic inspection can be carried out by a properly qualified and skilled person.

After 5 years of use, it is recommended that periodic inspections are carried out by the manufacturer of the equipment or an entity authorised by the manufacturer to carry out such inspections.

#### 8. MARKING OF DEVICE

Marking:

- a) Name/ type of device.
- b) Device model designation.
- c) Reference number.
- d) Number/year/class of European standard.
- e) CE mark and number of notified body which
- supervises the production of the equipment.
- f) Month and year of manufacture.
- g) Serial number of device.
- h) Attention: read instruction manual.
- i) Marking of manufacturer or distributor of the device.
- j) Maximum number of simultaneous users.



Figure 6 – Identity label of device

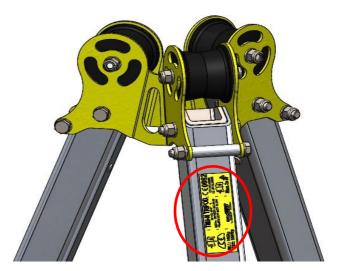


Figure 7 – Location of marking of device



#### Figure 8 - "Next inspection" sticker

"Next inspection" sticker should be affixed near identity label and it is necessary to mark month and year of the next periodic inspection. Do not use the device after this date.

Attention: Before the first use, mark the date of next inspection (date of first use + 12 months, e.g. first use 01.2013 – mark 01.2014). "Next inspection" sticker affixed near identity label.



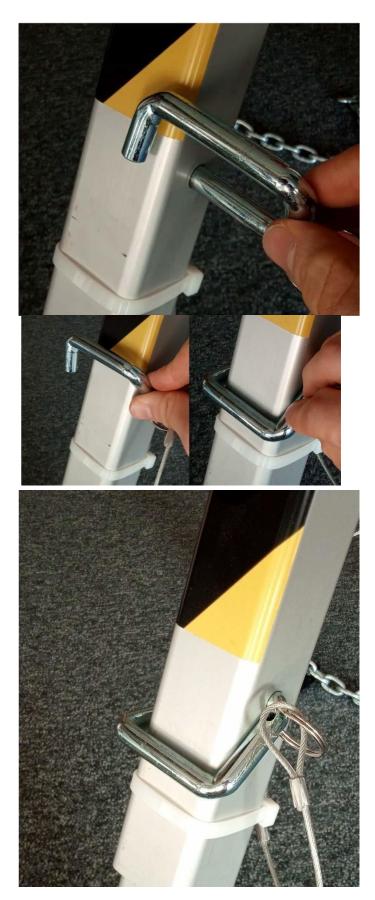
#### 9. INSTALLATION OF TRIPOD

Tripod TM9-N can be installed by one person.

a) Place the tripod vertically in the lowest position on a level, stable and hard surface. The legs should be turned outside to their maximum.
Make sure that feet are placed on a hard surface and can bear the load. The tripod should be placed above opening so that work rope is approximately in the middle of the opening.



- b) Pull out tripod legs to a desired length and lock them using locking split pins. Adjust length of legs so the head is located horizontally. Legs must be of the same length at all times.
- c) Correct securing of the leg with split pin.



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 d) Secure tripod legs against accidental moving apart with a chain. Chain ends must be connected with a carabiner. The chain should be well tensioned between tripod legs. If necessary remove any excess clearance. Instead of chain, special strip (delivered with tripod) can be used.



e) To fold the tripod, remove steps, pull out cotter bolts and fold the legs.

#### 10. INSTALLATION OF WORK ROPE OF DEVICE INSTALLED ON TRIPOD LEG

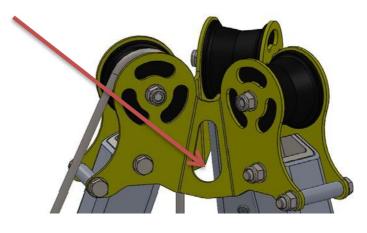
- a) Pull out adequate work rope length from the device and mount the rope on the roller integrated with the head. Check whether work rope is fitted correctly on the roller.
- Attach energy absorber SDW at the end of work rope of rescue devices RUP502-U, RUP503-U, RUP504, RUP506.





### 11. INSTALLATION OF PERSONAL FALL PROTECTION EQUIPMENT

Personal fall protection equipment can be connected to three anchor points located on side platens of the head. E.g. CR / WR retractable type fall arresters.



12. INSTALLATION OF UNIVERSAL HOLDER UTB (AT017-300) See: UTB instruction manual.

**13. INSTALLATION OF RESCUE DEVICES** See: UTB instruction manual.



#### 14. ESSENTIAL PRINCIPLES FOR USE OF PERSONAL FALL PROTECTION EQUIPMENT

• Anchor point AT150 must be used in accordance with instruction manuals for personal fall protection equipment and standards:

EN 361 - full body harnesses

EN 352-3; EN 355; EN 360 - fall restraint devices EN 362 - connectors

EN 795 / TS16415 - anchor points

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- personal fall protection equipment should be used only by personnel trained in its use.
- personal fall protection equipment must not be used by a person with medical condition that could affect safety of the equipment user in normal and emergency use.
- prepare a rescue plan to be implemented whenever necessary.
- it is forbidden to make any alterations or additions to the equipment without prior written consent given by the manufacturer.
- any repair shall only be carried out by manufacturer of the equipment or his certified representative.
- personal fall protection equipment shall not be used for any purpose other than intended.
- personal fall protection equipment provides individual protection and shall be used by one person only.
- before each use make sure that all parts of fall protection system cooperate correctly. Periodically examine connections and fitting of components of the equipment to prevent any accidental loosening or disconnection.
- it is forbidden to use a combination of the equipment where function of any one item is affected by, or interferes with the function of any other.
- before each use of personal fall protection equipment, a pre-use check should be carried out to ensure that it is in a serviceable condition and operates correctly.
- In particular, inspect all accessible elements of the equipment for any damages, excessive wear, corrosion, abrasion, cutting or improper function. For individual devices pay particular attention to:
  - in full body harnesses and work positioning devices: buckles, regulating elements, attachment points (buckles), webbings, seams, belt loops;
  - ✓ in energy absorbers: attachment loops, webbings, seams, housing, connectors;
  - ✓ in lanyards and textile guides: rope, loops, thimbles, connectors, regulating parts, splices;
  - ✓ in lanyards and steel guides: rope, wires, clamps, loops, thimbles, connectors, regulating parts;
  - in retractable type fall arresters: lanyard or webbing, retractor and locking mechanism for proper operation, housing, energy absorber, connectors;
  - ✓ in guided type fall arresters: body, proper guiding, locking mechanism for proper operation, rollers, bolts and rivets, connectors, energy absorber;

- in connectors (snap hooks): load-bearing body, rivets, main pawl, locking mechanism functionality.
- at least once a year, after each 12 months of use, personal fall protection equipment must be withdrawn from use to carry out periodic detailed inspection. Periodic inspection can be carried out by a person who is responsible for periodic inspections in user's organisation and properly trained in this respect. Periodic inspections can be carried out also by the manufacturer of the equipment or his authorized representative, or an authorized company. Inspect in detail all accessible elements of the equipment paying attention to any damages, excessive wear, corrosion, abrasion, cutting or incorrect function (see the above item.) In some cases, if fall protection equipment has a complex design (e.g. fall arresters), periodic inspections can be carried out by the manufacturer of the equipment, or his authorized representative only. After the periodic inspection, date of the next inspection should be defined.
- regular periodic inspections are essential in respect of the equipment condition and safety of users which is dependent on functionality and durability of the equipment.
- during periodic inspection it is necessary to check the legibility of all markings on the equipment (identity label of the device).
- all information on fall protection equipment (name, serial number, date of purchase and date of first use, name of user, information on repairs and inspections and withdrawal from use) must be provided in the Identity card of the device. It is responsibility of user's organisation to provide the Identity card and to fill in the required details. The Identity card should be filled in by a person in charge of personal fall protection equipment in user's organisation. It is forbidden to use personal fall protection equipment if the Identity card is not filled in.
- if the equipment is re-sold outside the original country of destination the reseller must provide instructions for use, for maintenance, for periodic inspection and for repair in language of the country where the product is to be used.
- personal fall protection equipment must be withdrawn from use immediately if any doubts arise in regard of its condition, or proper operation. The equipment must not be used until manufacturer of the equipment carries out a detailed inspection and gives his written consent to use the equipment again.
- personal fall protection equipment must be withdrawn from use immediately and destroyed if it has been used to arrest a fall.
- full body harness is the only admissible device to be used to support the user's body in personal fall protection equipment.

• in full body harness use only attachment points (buckles, loops) marked with capital letter "A" to attach a fall protection system.

#### 15. WARRANTY

The manufacturer grants a warranty for 12 months from the date of purchase of the device. If a defect is found in any part, the warranty and guarantee period for this part is extended by the time of repairs and effective removal of the defect found.

The warranty covers:

- Defects in material,
- Defects in workmanship,
- Anti-corrosion coating defects

According to the requirements of EN 365 an anchor point shall be subject to periodic inspections carried out at least every 12 months. Periodic inspection shall be carried out by service point authorized by the manufacturer located at the following address:

#### PROTEKT Grzegorz Łaszkiewicz ul. Starorudzka 9 93-403 Łódź

or person trained in inspections of such equipment.

A trained person is a person who, based on own specialized education and adequate experience, has sufficient knowledge in installed protective and rescue equipment, and is familiarized with applicable OHS regulations, guidelines and generally acknowledged technical rules to such extent that is able to assess safety of use and correct application of protection devices.

Before each use of the system check whether date of the next inspection is not expired. Do not use the device after this date. Before each use of the system visually check the system for its integrity and technical condition and whether steel cable is tensioned.

If any defect or lack of integrity is found, do not use the point.

If any doubts arise as regards the use of the equipment, please contact the manufacturer and never repair the equipment on your own!

A system which has been used to arrest a fall must be withdrawn from use immediately!

The system which has been used to arrest a fall can be admitted for use again after a detailed inspection is carried out by the manufacturer or an authorized service point.

When using the system, pay special attention to risks affecting operation of the personal fall protection equipment or the user's safety, and in particular to kinks and rope movement on sharp edges, oscillatory falls, electricity, influence of extreme temperatures, equipment damage, adverse environmental factors, chemical substances and contamination.

Neither modify, repair components of the system nor replace them with non-original spare parts.



#### 16. IDENTITY CARD

IDENTITY CARD ( in accordance with EN365 )								
Reference number of device		TM 9-N (ref	TM 9-N (ref. AT011-N)		r:			
Date of first use ( installation )					facture:			
Pl	ace of installation							
User name:								
Inspection and repair record								
No.	Date of inspection	Type of inspection / repair	Remarks		Date of next inspection	Name and signature of service technician		
1								
2								
3								
4								
5								
6								
7								
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10								