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SLOVENIA

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http: www.anthron.si
e-mail: info@anthron.si

MADE IN SLOVENIA (EU)

3 year guarantee
3 leta garancije
Garantie 3 ans
Garantie 3 jahre
Garanzia 3 anni
Garantia 3 anos

Model:
Model:
Modele:
Modell:
Modello:
Modelo:

DSDplus

Purchase date:
Datum nakupa:
Date de l'achat:
Kaufdatum:
Data di acquisto:
Fecha de compra.

Serial No.:
Serijska št.:
No. de serie:
Seriennumer:
No. di serie:
No. de serie:

Date of first use:
Datum prve uporabe:
Date de la premiere utilisation:
Datum der ersten Verwendung:
Data del primo utilizzo:
Fecha de la primera utilizacion:

Year of manufacture:
Leto izdelave:
Annee da fabrication:
Herstellungsjahr:
Anno di fabbricazione:
Ano de fabricacion:

User:
Uporabnik:
Utilisateur:
Benutzer:
Utilizzatore:
Usuario:

Inspection every 12 months
Kontrola vsakih 12 mesecev
Inspection tous les 12 mois
Kontrolle alle 12 Monate
Controllo ogni 12 mesi
Inspeccion cada 12 meses

	Date *Datum* *Date* *Datum* *Data* *Fecha*	**OK**	**Inspector** *Kontroliral* *Inspecteur habilite* *Kontrollbeauftragter* *Controllore* *Inspector*
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

DSDplus

DOUBLE STOP DESCENDER

Single rope descender with two jamming positions

ver.04.2015

ANTHRON

CE 0123

TUEV Product Service GmbH
Daimlerstraße 11
D-85748 GARCHING, Germany

EN 341:2011
Class A

Ropes diameter
Ø11 mm

EN 12841:2006
Type C

Ropes diameter
9 mm ≤ Ø ≤ 12mm

WARNING:
Activities at height are inherently dangerous. Understand and accept the risks involved before participating. You are responsible for your own actions and decisions. Before using this product, read and understand all instructions and warnings that accompany it and familiarize with its proper use, capabilities and limitations. We recommend that every climber seeks proper training in the use of the equipment. Failure to read and follow these warnings can result in severe injury or even death!

DSDplus is a self-braking descender for single rope use and is certified according to the norms EN 341:2011, Class A and EN 12841:2006 Type C. While the former norm is meant for rescue purposes only the later implies rope access.

USE: rescue, intervention, industry, sport: rope access, independent descent, assisted descent, emergency evacuations, work at height…

EN 341:2011

ROPE TYPE(S) (concordant with EN 1891):

Tests according to the norm EN 341:2011 have been performed with:
- a low stretch kernmantel rope BORNACK TEC-Static Pro, 11 mm
- a low stretch kernmantel rope TEUFELBERGER Patron, 11 mm

Diameter 11 mm	BORNACK Tec-Static Pro	TEUFELBERGER Patron
min. rated load **kg**	40	30
max. rated load **kg**	130	160
max. descent dist. **m**	180	190
nr. of consecutive descents	32	25
sheath slippage **Ss**	0,0 %	0,1 %
elongation **E**	3,9 %	3 %
mass per metre **M**	79 g/m	75 g/m
sheath proportion **Sp**	41,2 %	35 %
core proportion **C**	58,5 %	65 %
shrinkage **R**	1,3 %	4,2 %
material	PA	PA

TESTED AND APPROVED FOR DESCENTS WITH A RELEASED ENERGY OF 7,5MJ (according to EN 341 class A).

$$W = m \times g \times h \times n$$

m: mass (kg)
g: acceleration of gravity = 9,81 m/s^2
h: height (m)
n: number of descents

APPROVED TEMPERATURE RANGE:

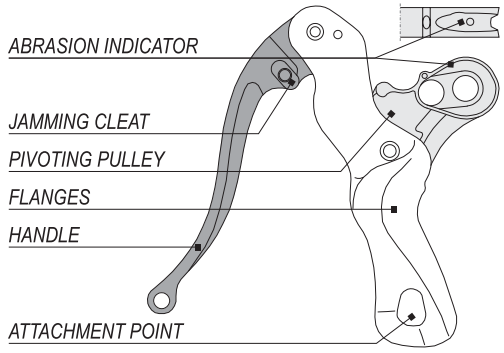
-20 °C ≤ approved temperature ≤ 60 °C

EN 12841:2006 Type C

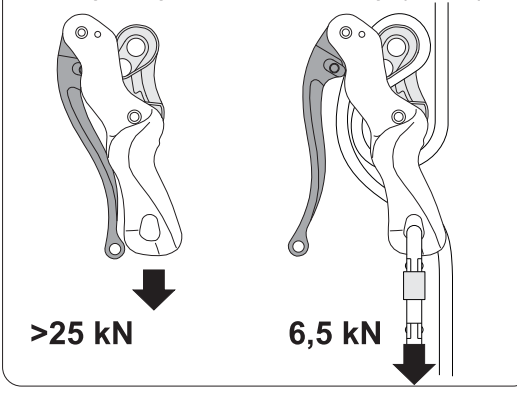
Certified for use with static (EN 1891 Type A) ropes with diameters between 9 mm and 12 mm.

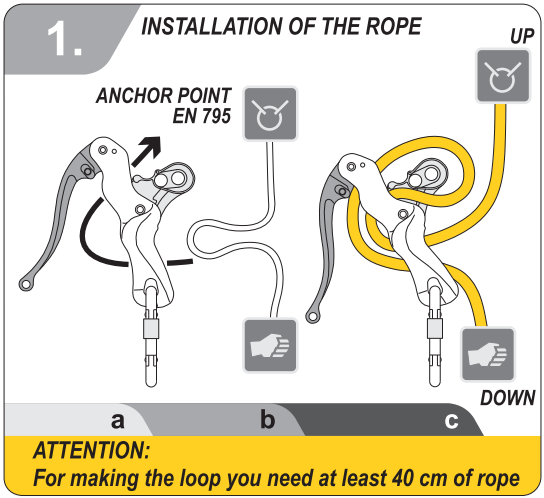
Diameter	Maximum rated load
9 mm ≤ Ø < 10 mm	130 kg
10 mm ≤ Ø ≤ 12 mm	200 kg

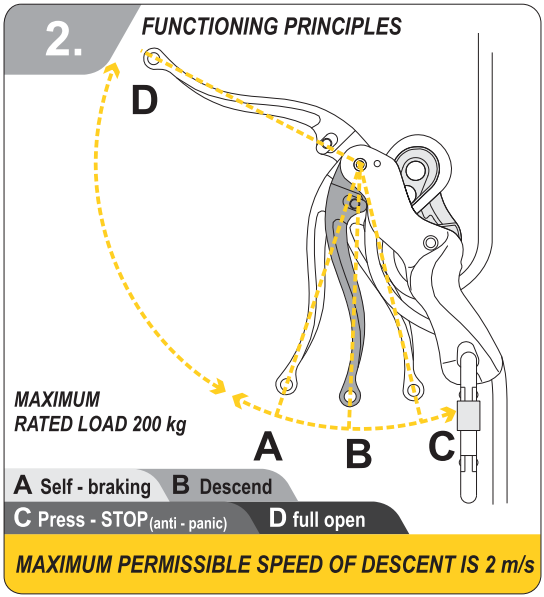
NOMENCLATURE OF PARTS DSD plus

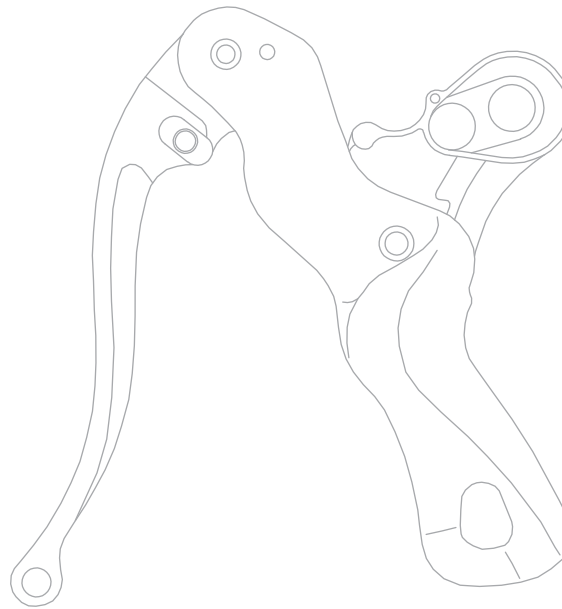


Breaking strength ***Start of slippage (Ø11mm)***

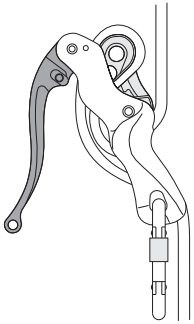


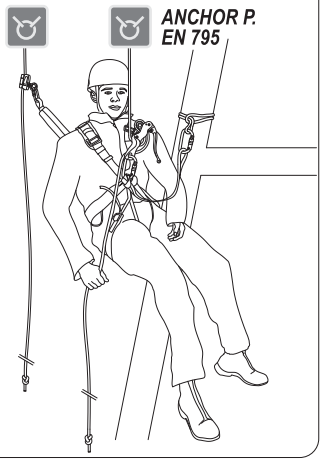

1.
INSTALLATION OF THE ROPE
UP
ANCHOR POINT
EN 795
DOWN
a
b
c
ATTENTION:
For making the loop you need at least 40 cm of rope


2.
FUNCTIONING PRINCIPLES
D
MAXIMUM
RATED LOAD 200 kg
A
B
C
A Self - braking
B Descend
C Press - STOP (anti - panic)
D full open
MAXIMUM PERMISSIBLE SPEED OF DESCENT IS 2 m/s



3. OPERATIONAL CHECK





SELF-BRAKE
There should be
no pressure on the handle

5. ACCOMPAINED DESCENT

MAX 200 kg

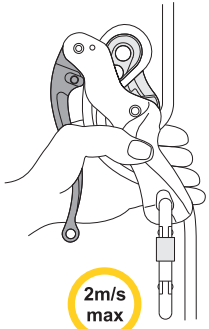
RESCUE

DESCENT ASSISTED
BY RESCUER

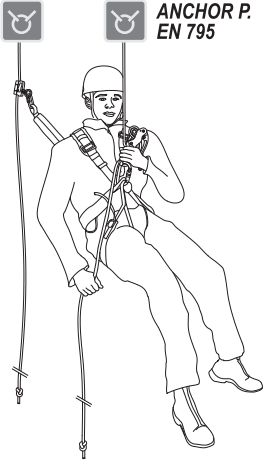
1m/s
max

RESCUE
Press the handle firmly
against descender's body

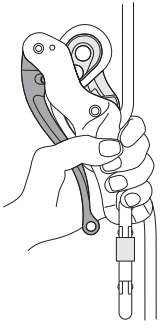
4. DESCENT



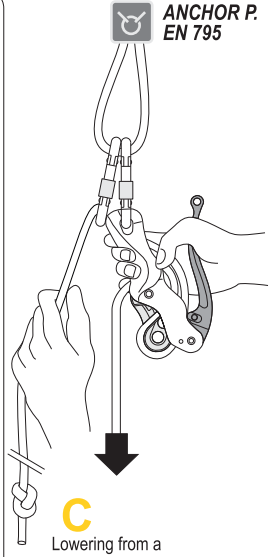
2m/s
max



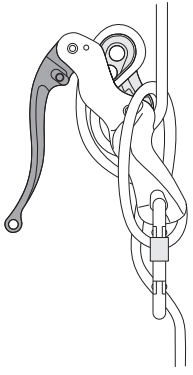
A
DESCENDING
Push the handle in the
middle position



B
PRESS-STOP
Press the handle firmly
against descender's body



C
Lowering from a
fixed anchor point



D
Securing the device

6. DATA ON DSDplus

LOWER FLANGE

MANUFACTURER or SUPPLIER

MODEL

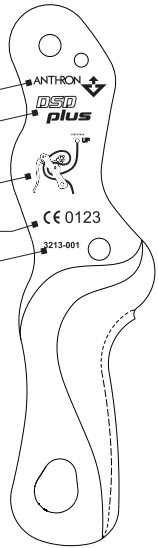
PICTOGRAM

BODY CONTROLLING THE MANUFACTURING OF PPE

SERIAL NUMBER WWYY-XXX

EUROPEAN NORMS AND ROPE DIAMETERS

INSTRUCTIONS READING LOGO

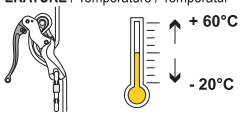


WW YY-XXX

- SERIAL NUMBER
- PRODUCTION YEAR
- PRODUCTION WEEK

UPPER FLANGE

TEMPERATURE / Température / Temperatur



STORAGE / Stockage / Lagerung

additionally away of sources of heat!

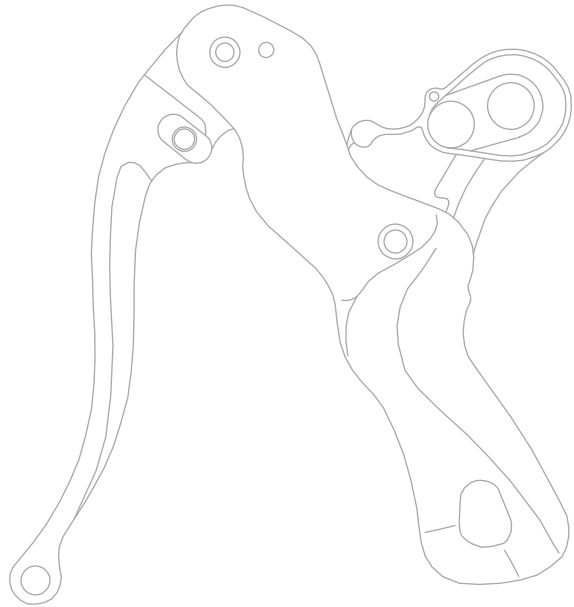
MAINTENANCE / Entretien / Wartung

moving joints!

CLEANING / Nettoyage / Reinigung

DANGEROUS PRODUCTS /
Produits dangereux / Gefährliche Produkte

IN CASE OF DOUBT, CONSULT PRODUCER OR VENDOR!



ENGLISH

READ THIS NOTICE CAREFULLY

This device was designed to offer you the degree of safety expected from personal protective equipment in accordance with the Directive 89/686/EEC.

SAFETY MEASURES AND WARNINGS

a) There are innumerable and even unimaginable possible modes of use of this device. Only techniques shown in the figures that are not crossed out or displaying a skull are recommended and covered by the warranty.
b) This product must be used exclusively by adequately skilled persons otherwise the user must be constantly supervised by trained personnel, who must guarantee for the safety. This includes liability against damages, injuries and death incurred by improper use or misuse of the equipment.
c) This product may be used combined with personal protective equipment conforming to Directive 89/686/EEC and compatibly with the relevant information.
d) Lifetime of this product will be extended if it is used with care. In particular avoid rubbing against abrasive surfaces and/or sharp edges.
e) Primary function of the descender is progression along a working line, and is not suitable for use in a fall arrest system. It must always be used in conjunction with a fall-arrest device on an independent safety line.
f) The braking action of the device and thus your safety may be considerably reduced if the device or the rope is dirty, oily, muddy or icy.
g) Prolonged use in salty environments (e.g. sea cliffs) may affect the performance of the product.
h) Do not expose the device to significant heat or cold (see work and stock temperature).
i) Avoid any contact with chemical reagents as they may affect the performance of this product. Contact the producer if in doubt.
j) The descender device should never be left in place (specifically outdoors) e.g. at a workstation because of the weathering deterioration of the rope.

FUNCTIONING PRINCIPLES

Figure 1: INSTALLATION OF THE ROPE

The descender can either be attached to the harness concordant with either EN 361, EN 813 or EN 12277 (fig.4/A - the operator slides with the descender along the rope) or it can be fastened to an anchor (fig.4/C – the rope slides through the non-moving descender). To install the descender on the rope, first form a bight on the rope (fig.1/B). The handle of the descender has to be pushed in its extreme open position and the jamming cleat has to be drawn out of the descender to its terminal point. Now the bight can be pushed in between both flanges at their lower end (fig.1/A), that is, between the attachment point and the jamming cleat. Care should be taken that the working (load carrying) end of the rope exits the device by the jamming cleat and the free end of the rope by the carabiner. Then thread the bight around the jamming cleat, between the upper parts of both flanges and finally catch the jamming cleat with the bight. Eventually move the jamming cleat back in the descender so that it engages the rope. If the rope has not been inserted correctly the descender will not be able to perform its function and will hence be of no use.

Figure 3: OPERATIONAL CHECK

Before each use carry out an operational check of the device by test-loading it with your body weight while secured by other means. Additionally it is essential to assess the reliability and security of the entire safety system you are relying on: adequate resistance of the anchors (EN 795) and their correct (higher) positioning to arrest a fall and prevent pendulum effects, correct positioning of the ropes – e.g. protecting sharp edges or points of rubbing, preventing ill running of the descender, redundancy, etc. – and to tie a stopper knot at the free end of the rope. Any overload or dynamic loading of the descender may damage the rope.

Figure 4: DESCENT

While loading the system, the user should hold with one hand the free end of the rope and with the other hand gradually push the handle against the descender's body (fig.4/A). This unblocks the rope and allows for a controlled descent. The maximal permitted speed of descent is 2 m/s. By increasing pressure on the handle the user will activate the descender's second braking position (anti panic) and when the pressure is high enough the descent will be stopped entirely (fig.4/B). By releasing the handle altogether the descent is stopped automatically (fig.2/A). Use a second braking carabiner to lower from a fixed position (fig.4/C). To prevent accidental uncontrolled descents, the descender may be locked-off entirely by forming a bight in the free end of the rope, passing it through the connecting carabiner and catching with the bight the entire descender (fig.4/D).

Figure 5: ACCOMPANIED DESCENT

This method of evacuation may only be adopted by rescuers specifically trained in this technique. No impact loading is tolerated. The rescuer fastens the descender to his harness and connects the injured person by means of an additional lanyard. Obligatory is the use of a supplementary braking carabiner as well as the use of gloves.

The rescuer and the injured person must be secured with an additional independently anchored safety line.

WARNING: With speeds above 1 m/s during rescue operations the descender may get hot enough to damage the line.

GENERAL INFORMATION

Regular examination:

- Do not hesitate to retire the device if it shows signs of wear (for rope abrasion see indicator on the pivoting pulley) or after a major fall or a major impact. They could cause internal or invisible damage that may significantly weaken its strength. In case of uncertainty treat the device as damaged or consult ANTHRON.
- Regular periodical inspections must be carried out by an competent person at least once a year. For this purpose an inspection record should be established (see the backside of these instructions). Furthermore we would sincerely recommend one set of equipment is used by one person only as its history of use is best traced and understood in this way.
- Before each use it is obligatory to check the descender and verify that all its components (handle, jamming cleat, flanges) are faultless and in good working condition.

Packing, storage, maintenance and cleaning

Each product is packed with its INSTRUCTIONS FOR USE. Proper maintenance and storage are imperative to ensure correct functioning of the product (as well as all your equipment) and thus your safety.

Clean the product with a brush under running cold water of domestic supply. If the stains persist, clean it in warm water (maximum 30°C) with ordinary soap. Then rinse thoroughly, wipe it with a towel and dry naturally in a shaded ventilated place away from sources of heat.

If needed, lube sparingly the moving joints of the jamming cleat and handle with silicon based oil.

Temperatures

While it is allowed to use this product within the temperature range from -20°C to +60°C, it is advisable to stock it in a dry place at room temperature.

Lifetime

Lifetime is set by the date of production and is theoretically unlimited. Service time starts with the date of first use and depends on frequency and mode of application, on environment where it is used (e.g. marine, cave, corrosive atmosphere), and on mechanical wear and damage. It is therefore very difficult to determine the expected service time of a particular device.

Its due retirement is therefore left to user's regular examinations and competent person's annual inspections.

Guarantee and its limitations

This product is guaranteed for 3 years from purchase against any faults in materials or manufacture. The guarantee does not apply in cases of misuse, normal wear and tear, unauthorized modifications or alterations, improper use, improper maintenance, accident, negligence, damage, or if the product is used for a purpose it was not designed for. If you discover a defect, you should return the product to the reseller you purchased the product from or directly to ANTHRON.

ANTHRON is not responsible for the consequences of direct, indirect, accidental or any other type of damage resulting from the use of its products.