



Product Service

CERTIFICATE

No. Z1 09 04 67317 001

Holder of Certificate: **Dropzone (UK) Ltd.**

Everley Blandford
Dorset
DT11 8PT
UNITED KINGDOM

Production Facility(ies):

67317

Certification Mark:



Product:

Descender devices

Model(s):

Powerfan PF 13

Parameters:

Use:

- Descender device or retractable fall arrester for the use as ropes course element or
- Descender device for evacuation in a rescue situation;

Function principle:

Contents of frame, descending rope with shock absorbing element and attachment device, rope drum, transmission, fan, rewind system;

-in descending modus device controls the speed of a person's descent by dissipating the potential energy by means of a fan; the descending speed is not constant, after the start the speed is high and landing speed is slow; speed regulation by rope drum design;

-in retractable fall arrest modus tension in the descending rope is given by the rewind system while someone is climbing up vertical;

More Parameters: see Annex

Tested according to:

DIN EN 341:1992
DIN EN 360:2002

The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. The certification mark must not be altered in any way. See also notes overleaf.

Test report no.:
Valid until:
Date, 2009-04-21

71339172
2014-04-09

Page 1 of 3





Annex to

TÜV Mark Certificate No. Z1 09 04 67317 001

Powerfan PF 13:

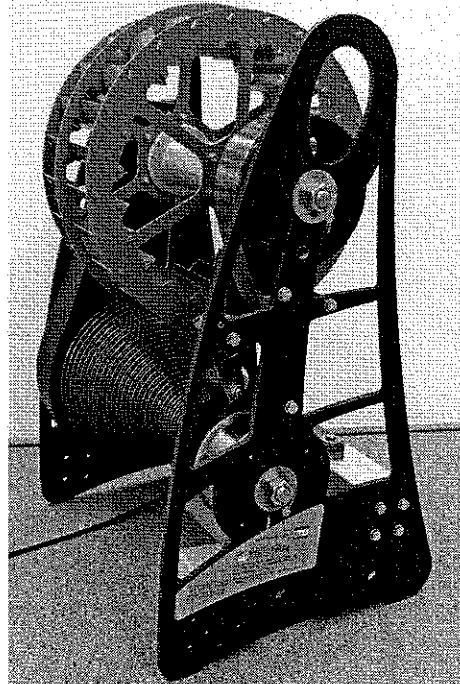
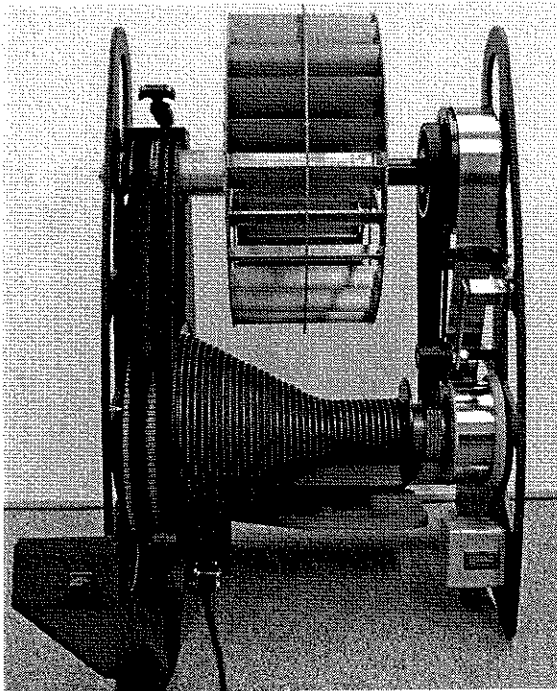
Dimensions:	h x w x d: 810 mm x 570 mm x 430 mm;
Fixation:	2 oval holes l x b: 130 mm x 80 mm in the upper area of the frame plates; or 4 holes \varnothing 16.5mm in the lower area of the frame plates.
Descend length:	13 m
Frame:	l x w x d: 888 mm x 420 mm x 8,5 mm; aluminium sheet plate with support for fixation, fan axle, rope drum axle;
Descending rope:	\varnothing 5 mm Dyneema rope; Type: Excel D 12; 12 strand Armourcoated; min. breaking strength: 1905 kg; end termination for attachment: stitched eye with integrated connector EN 362, (EC type examination certificate no. 0082/141/160/08/05/0238), shock absorber (EC type examination certificate no. 0082/047/160/09/05/0263) and Connector type Belay Master (EC type examination certificate no. GB06/67722), – alternative connectors conform to EN 362 are possible; end termination rope end: stitched eye with knot; stitching yarn all in contrast colour;
Shock absorber:	shock absorber (EC type examination certificate no. 0082/047/160/09/05/0263)
Attachment device:	connector EN 362, (EC type examination certificate no. 0082/141/160/08/05/0238), Connector type Belay Master (EC type examination certificate no. GB06/67722)
Rope Drum:	d x l: \varnothing 280 mm x 329 mm; aluminium;
Descend speed transmission:	103 to 34 teeth aluminium timing pulleys with 2 timing belts; driven by rope drum; timing belts pretensioned during assembly;
Fan:	d x l: \varnothing 450 mm x 205 mm; made from aluminium sheets with folded tags; 24 fan blades;
Rewind system:	steel rewind spring with spring storage drum and spring torque drum; driven by rope drum over 52 to 104 teeth aluminium timing pulleys with one timing belt; with timing belt tensioner;
Counter:	battery driven electrical digital counter with magnetic contact impulse;
Auxiliaries:	Connectors at end termination for attachment can be various, if conform to EN 362;



Product Service

Working load: 20 – 120 kg
 Max. permitted landing speed: 2 m/s;
 Max. tested descending height: 13 m;
 Max no. of descends: 20 000 or 1 year of use on the rope, then exchange;
 17 000 or 1 year of use on the rewind spring, then exchange;
 250 000 or 2 years of use on the device, then manufacturer inspection;
 Marking: Manufacturer, type, CE-marking, pictogram: "read instructions"-pictogram; serial no.; max. working load and descending height;

At the attachment end termination of the rope alternative connectors conform to EN 362 can be used.



Department: SWR / kn
 Date: 2009-04-??

Page 3 of 3



Product Service

EC-Type Approval Certificate

No. P5 09 04 67317 002

Holder of Certificate: Dropzone (UK) Ltd.

Everley Blandford
Dorset
DT11 8PT
UNITED KINGDOM

Product: PPE against fall from a height
Descender device, EN 341/EN 360

Model(s): Powerfan PF 13

Parameters: Use:
-Descender device or retractable fall arrester for the use as ropes course element or
-Descender device for evacuation in a rescue situation;
Function principle:
Contents of frame, descending rope with shock absorbing element and attachment device, rope drum, transmission, fan, rewind system;
-in descending modus device controls the speed of a person's descent by dissipating the potential energy by means of a fan; the descending speed is not constant, after the start the speed is high and landing speed is slow; speed regulation by rope drum design;
-in retractable fall arrest modus tension in the descending rope is given by the rewind system while someone is climbing up vertical;
More Parameters: see Annex

This EC-Type Approval Certificate is issued according to Article 8 (PPE of category 3) of Council Directive 89/686/EEC for personal protective equipment. It confirms that the listed product fulfills the basic requirements as specified in Annex II of the Directive. This certificate refers only to the sample submitted to TÜV SÜD Product Service GmbH for testing and certification and on its technical documentation. See also notes overleaf.

Test report no.: 71339172

Date, 2009-04-20



TÜV SÜD Product Service GmbH is Notified Body according to Council Directive 89/686/EEC for personal protective equipment, notified by publication in the Official Journal of the EC No. C 203/44 dated July 07th, 1994 with identification No. 0123.

Page 1 of 3



Annex to

EC-Type Approval Certificate No. P5 09 04 67317 002

Powerfan PF 13:

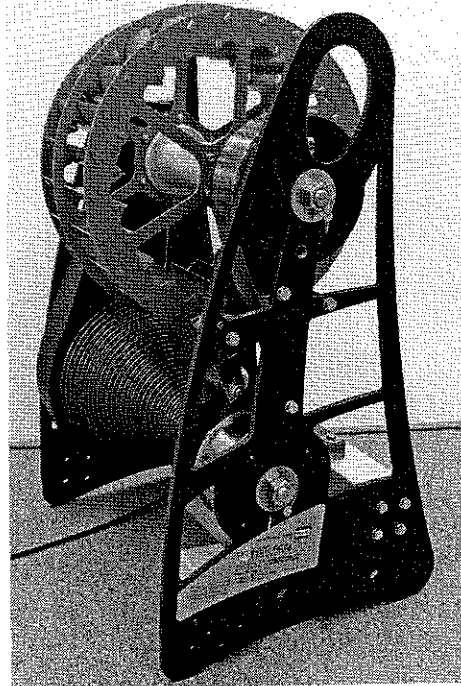
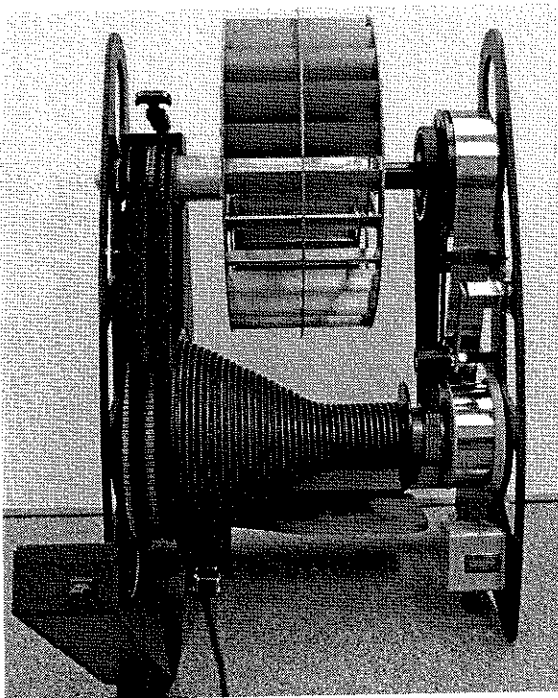
- Dimensions: h x w x d: 810 mm x 570 mm x 430 mm;
- Fixation: 2 oval holes l x b: 130 mm x 80 mm in the upper area of the frame plates; or 4 holes \varnothing 16.5mm in the lower area of the frame plates.
- Descend length: 13 m
- Frame: l x w x d: 888 mm x 420 mm x 8,5 mm; aluminium sheet plate with support for fixation, fan axle, rope drum axle;
- Descending rope: \varnothing 5 mm Dyneema rope;
Type: Excel D 12; 12 strand Armourcoated;
min. breaking strength: 1905 kg;
end termination for attachment: stitched eye with integrated connector EN 362, (EC type examination certificate no. 0082/141/160/08/05/0238), shock absorber (EC type examination certificate no. 0082/047/160/09/05/0263) and Connector type Belay Master (EC type examination certificate no. GB06/67722),
– alternative connectors conform to EN 362 are possible;
- Shock absorber: shock absorber (EC type examination certificate no. 0082/047/160/09/05/0263)
- Attachment device: connector EN 362, (EC type examination certificate no. 0082/141/160/08/05/0238),
Connector type Belay Master (EC type examination certificate no. GB06/67722)
- Rope Drum: d x l: \varnothing 280 mm x 329 mm; aluminium;
- Descend speed transmission: 103 to 34 teeth aluminium timing pulleys with 2 timing belts; driven by rope drum; timing belts pretensioned during assembly;
- Fan: d x l: \varnothing 450 mm x 205 mm; made from aluminium sheets with folded tags; 24 fan blades;
- Rewind system: steel rewind spring with spring storage drum and spring torque drum; driven by rope drum over 52 to 104 teeth aluminium timing pulleys with one timing belt; with timing belt tensioner;
- Counter: battery driven electrical digital counter with magnetic contact impulse;
- Auxiliaries: Connectors at end termination for attachment can be various, if conform to EN 362;



Product Service

Working load:	20 – 120 kg
Max. permitted landing speed:	2 m/s;
Max. tested descending height:	13 m;
Max no. of descends:	20 000 or 1 year of use on the rope, then exchange; 17 000 or 1 year of use on the rewind spring, then exchange; 250 000 or 2 years of use on the device, then manufacturer inspection;
Marking:	Manufacturer, type, CE-marking, pictogram: "read instructions"-pictogram; serial no.; max. working load and descending height;

At the attachment end termination of the rope alternative connectors conform to EN 362 can be used.



Department: SWR / kn
Date: 2009-04-20

Page 3 of 3