

- DECLARATION of DESIGN and PERFORMANCE -

DDP No. 40.010/96 Issue 8

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1 Name and address of manufacturer

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Up to Serial-Number 219 388 the described type of parachute was produced by Brüggemann & Brand GmbH & Co. KG, Oberwengerner Str. 209, 5802 Wetter 4, GERMANY..

2 Description and identification of article

2.1 Type designation

Type No. 12-82/23 R

Series I

P/N 901444-11

Variants colour does not influence the airworthiness and is not reflected in the part number

Possible variants see: "Gerätehandbuch" (GERMAN)

2.2 Description

2.2.1 Purpose

Rescue Parachute

2.2.2 Master Drawing Record

Master Drawing record according P/N 901444-11

2.2.3 Construction units and materials used

The rescue parachute consist of the following construction units

Parachute canopy and suspension lines

P/N 901731-010

Parabolic steerable canopy with 22 gores

22. suspension lines – bundled in two groups of 11 suspension lines to one of which a steering line is attached

Dimensions: Canopy dia.: ~ 7,01 m
 Canopy Area: ~ 38,60 m²
 Crone dia. ~ ~ 0,90 m
 Line length: ~ 5,80 m

Canopy material Airtight Nylon-Ripstop

Pilot chute variants

a) *P/N 901731-101*

6-Gores-Pilot chute, coil spring with closing loop.
 Diameter ~ 0,90 m

b) *P/N 901732-101*

6-Gores-Pilot chute, conical spring with closing loop.
 Diameter ~ 0,90 m

Bridle

P/N 901733-101

Tubular tape with loops on each end.

Length ~ 1,6 m

Container and Harness

P/N 901734-101 *Container as part of the harness*

P/N 901788-101 *Harness*

P/N 901789-101 *Container*

Container closed by a 3-pin closing loop.

Ripcord

P/N 901799-101

3-pin ripcord with handle

Length	~0,895 m w/o handle
Material	Steel rope

2.2.4 Identification plate

Two identification plates are attached to the parachute.

First sticker with performance and operational limits inside the container. Second is the manufacturer, serial-no, date of manufacture, space for approval tags and space for inspection dates located outside.

3 Specification Reference

“Lufttüchtigkeitsforderungen für Personenfallschirme(LFP)”, Issue October 1968

4 Performance and Operational Limits

Max. Load	100 kg
Dropping speed	min. 110 km/h max. 240 km/h
Minimum opening altitude	100 m
Rate of descend	~ 6m/sec at 80kg load
Packing interval	12 month
Operating time	20 years
Weight	6,9kg
Dimensions	about 0,52 x 0,34 x 0,07 m (overall w/o cushion)

5 Particulars of approvals held for the parachute

The described parachute has been certified according to the German legislation named as “Lufttüchtigkeitsforderungen für Personenfallschirme (LFP)”, release October 1968. The type certification has been issued on the 14th of July 1982. All related documents and drawings are attached to the certification record.

6 Reference to the Qualification Test Report

6.1 Original test report

For the original test report refer to Geräte-Kennblatt Nr. 40.010/96 Ausgabe 7.

6.2 Extension of the rigging interval

For the extension of the rigging interval refer to TD 001-01-15.

7 Service and Instruction Manual

Parachute manual "Geräte-Handbuch" P/N 150-901444 issued by Firma Heinrich Mertens, release 18.11.2016. No further deviations are provided.

8 Statement of Compliance with the Requirement Document

This parachute complies with "Lufttüchtigkeitsforderungen für Personenfallschirme (LFP)", issue October 1968.

9 Environmental Qualification

Three drops to a drop speed of 120 km/h were performed, where prior to the test the parachute assembly was subjected to the following preconditioning:

- 1) Precondition for 16 h at not less than +200 °F (93.3 °C), stabilize to ambient and test drop.
- 2) Precondition for 16 h at not greater than -40 °F (-40 °C), stabilize to ambient and test drop.
- 3) Precondition for not less than 400 continuous hours with a 200 lbf (889.6 N) or greater load applied to compress the pack in a manner similar to that most likely to be encountered in actual use. Test drop within 1 h after removing the load.

10 Statement with Regard to Software

The parachute contains no software.

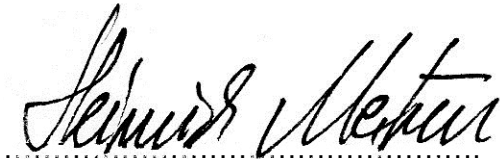
11 Statement with Regard to Complex Hardware

The parachute contains no complex hardware.

12 Manufactures declaration

The declaration on this document is made under the authority of "Firma Heinrich Mertens", "Firma Heinrich Mertens" cannot accept responsibility for equipment used outside the limiting conditions stated above without their agreement.

Date: 17.11.2016



Heinrich Mertens



Lasse Mertens

13 Annex

Geräte-Kennblatt Nr. 40.010/96 Ausgabe 7 - 19. Oktober 1999