

Weld-On Lifting Point -
loadable from any side - stainless steel

> PSA INOX-ABA <
for 1-2 persons



Safety instructions

This safety instruction has to be kept on file
for the whole lifetime of the product
and forwarded with the product.

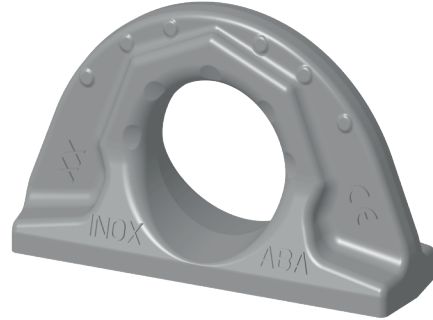
TRANSLATION OF THE ORIGINAL INSTRUCTIONS



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RUD-Art.-Nr.: 7914004-EN / V02 - 01.025

Fall protection anchorage point (PSA)



Weld-On Lifting Point - stainless steel
PSA INOX-ABA
for 1-2 persons

Testing regulation: DIN CEN / TS 16415:2013-04
EN 795:2012-10

Notifying department - Kennn Identification No: 0158
DEKRA Testing and Certification GmbH
Persönliche Schutzausrüstung / Personal Protective Equipment
Dinnendahlstraße 9, 44809 Bochum

EG-Einbauerklärung	
Hersteller:	RUD Ketten Rieger & Dietz GmbH u. Co. KG Friedensinsel 73432 Aalen
<p>Hiermit erklären wir auf Grundlage der durchgeführten Prüfungen nach Q-A-65 (Ausg.01.10.2021), dass die nachfolgend bezeichnete Anschlageneinrichtung aufgrund ihrer Konzipierung und Bauart, sowie in der von uns in Verkehr gebrachten Ausführung, den grundlegenden Sicherheits- und Gesundheitsanforderungen der EG-Richtlinie 2001/95/EG entspricht. Bei einer nicht mit uns abgestimmten Änderung der Anschlageneinrichtung verliert diese Erklärung ihre Gültigkeit.</p>	
Produktbezeichnung:	<u>Anschlagpunkt PSA INOX-ABA</u> für die Befestigung einer persönlichen Schutzausrüstung nach DIN EN 795:2012-10 bzw. DIN CEN/TS 16415:2013-04
Folgende harmonisierten Normen wurden angewandt:	<u>DIN CEN/TS 16415 : 2013-04</u> <u>DIN EN 795 : 2012-10</u>
Folgende nationalen Normen und technische Spezifikationen wurden außerdem angewandt:	_____
Notifizierte Stelle:	DEKRA PSA Prüf- und Zertifizierungsstelle - PRÜFZERT Kennnummer: 0158
Für die Zusammenstellung der Konformitätsdokumentation bevollmächtigte Person:	Michael Betzler, RUD Ketten, 73432 Aalen
Aalen, den 12.08.2024	Hermann Kolb, Bereichsleitung MA
Name, Funktion und Unterschrift Verantwortlicher	

EC-Mounting declaration	
Manufacturer:	RUD Ketten Rieger & Dietz GmbH u. Co. KG Friedensinsel 73432 Aalen Germany
<p>Based on the tests carried out in accordance with Q-A-65 (October 2021 edition), we hereby declare that the subsequently described anchor point, both in its design and construction and in the form as delivered, complies with the essential health and safety requirements of EC Directive 2001/95/EC. This declaration shall no longer be valid if changes are made to the anchor point without our authorisation.</p>	
Product name:	<u>Anchor point Lifting Point PSA INOX-ABA</u> for securing a personal fall protection system in accordance with DIN EN 795 2012-10 or DIN EN CEN/TS 16415: 2013-04
The following harmonized norms were applied:	<u>DIN CEN/TS 16415 : 2013-04</u> <u>DIN EN 795 : 2012-10</u>
The following national norms and technical specifications were applied:	_____
Notifying department:	DEKRA PSA Test- and Certification department PRÜFZERT Identification No.: 0158
Authorized person for the configuration of the declaration documents:	Michael Betzler, RUD Ketten, 73432 Aalen
Aalen, 12.08.2024	Hermann Kolb, Head of division MA
Name, function and signature of the responsible person	





Before initial usage of the PSA-Fall protection anchorage point (PSA INOX-ABA for 1-2 persons), please read carefully the safety instructions. Make sure that you have understood all subjected matters.

For applications that do not involve a PSA-Fall protection anchorage point, we recommend that you read the INOX-ABA safety instructions (RUD Ref.-No. 7912400) carefully.

Non-observance can lead to serious personal injuries and material damage and eliminates warranty.

1 Application and warning information



WARNING

Improper assembled or damaged PSA INOX-ABA for 1-2 persons and inappropriate use can result in deadly injury or lead to heavy injuries when load drops. Inspect PSA INOX-ABA for 1-2 persons before each use carefully!

- PSA INOX-ABA for 1-2 persons must only be used by competent and trained people with adequate knowledge, and outside Germany the corresponding country specific requirements must be utilised.
- Remove all body parts (fingers, hands, arms, etc.) out of the hazard area (danger of crushing or squeezing) during the lifting process.
- The user of the PSA INOX-ABA for 1-2 persons must be in good health to use this equipment. The hereby necessary certification can f.e. be verified by a G41-checkup.
- The PSA INOX-ABA for 1-2 persons must only be loaded with the stated number of persons.
- To enable safety and appropriate information for all users in case of a resell to another country, the reseller must provide the user instruction, maintenance instruction for the regular inspection and the repairing in the country specific language.
- No technical alterations must be implemented on the PSA INOX-ABA for 1-2 persons.
- No people may stay in the danger zone.
- Jerky lifting (strong impacts) should be prevented.
- Always ensure a stable position of the load when lifting. Swinging must be prevented.
- Damaged or worn PSA INOX-ABA for 1-2 persons must never be utilised.

2 Intended use

PSA INOX-ABA for 1-2 persons can be used as anchor point, for fall protection harnesses. This anchor point (PSA-Fall protection anchorage point) can also be attached permanent to a building, so that a fall protection harness can be hooked in.

PSA INOX-ABA for 1-2 persons must only be used as fall arrest equipment (and not for lifting purposes).

PSA INOX-ABA for 1-2 persons are designed to stand pivoting movements under load as they can occur during a fall.

PSA INOX-ABA for 1-2 persons are permissible for max. 2 persons.

PSA INOX-ABA for 1-2 persons are able to take all possible occurring forces in any loading directions if used in the intended way as fall arrest protection devices.

In consequence of the assembly method this product fulfils the requirements as described in DIN EN 795:2012 paragraph 3.2.1:

Fall protection anchorage device type A

Fall protection anchorage device which includes when installed, either one or multiple stationary anchor point(s) and if for their fixing at the structural facility a stationary installed anchor point or a fixing element is necessary.

Loading from any side is permitted.

PSA INOX-ABA for 1-2 persons must not be hot-dip galvanised.

PSA INOX-ABA for 1-2 persons must only be used for the in the user instruction specified purposes.

3 Material properties

The ferrite-austenite structure of 1.4462 shows excellent corrosion resistance in acidic environments. In particular in phosphoric and organic acids, also in chlorine-containing media. The corrosion resistance is higher compared to the standard austenites (e.g. 1.4301, 1.4541, 1.4404). Due to the duplex structure of the microstructure, 1.4462 is usually superior to the austenitic steels, as it is insensitive to intergranular corrosion and particularly resistant to stress corrosion cracking, pitting and crevice corrosion.

1.4462 is resistant to seawater and media containing H₂S.

PSA INOX-ABA for 1-2 persons can be used in a wide range of applications, such as in the construction industry, the chemical industry, the petroleum industry, the food industry (moderate resistance to lactic acid!), in mechanical engineering, e.g. as a FGD component, in desalination plants, OFF Shore applications and in shipbuilding.

The material 1.4462 is also suitable for applications in the nuclear technology, as far as the nuclear rules or object-related specifications allow the use.

4 Assembly- and instruction manual



HINT

The manufacturer RUD guarantees the overall conformity of the PSA INOX-ABA for 1-2 persons only after complete and correct implementation of the assembly and welding specifications!

• **General information**

- Capability of temperature usage:
PSA INOX-ABA for 1-2 persons may be used in the temperature range from -40°C to 250°C. If necessary, take into account temperature-related reductions in the load-bearing capacity of other connection components used.



HINT

After use above the maximum specified temperature, further use is no longer permitted and the lifting point must be replaced. The quality / safety of the lifting point is then no longer guaranteed.



HINT

The material 1.4462 tends to '475° embrittlement' and also to sigma phase embrittlement. This range is not reached with the permissible application temperature of up to 250°C.

- The reuse of cut-off PSA INOX-ABA for 1-2 persons is not permitted.
- PSA INOX-ABA for 1-2 persons must not be used with aggressive chemicals such as acids, alkaline solutions and their vapours. Please also refer to chapter 2 *Intended use*.
- Please mark mounting position of PSA INOX-ABA for 1-2 persons with a coloured contrast paint for better visibility.
- A plan must exist to accomplish rescue actions, including all kinds of possible emergencies occurring with the work.
- Modifications or repairing on the PSA INOX-ABA for 1-2 persons must be carried out by the manufacturer only.
- Correct maintenance and storage of PSA INOX-ABA for 1-2 persons are important for the safety of the worker.

4.1 Assembly information

- The material construction to which the PSA INOX-ABA for 1-2 persons will be attached should be of adequate strength to withstand forces without deformation (certificate of static forces).

We recommend using the test forces from the respective national standards/regulations during the design of the installation area. Example:

	1 person	2 persons
DIN EN 795	12 kN	see DIN CEN/TS 16415
DIN CEN/TS 16415	see DIN EN 795	13 kN

Table 1: Test forces

- The weld-on material must be suitable for welding and the contact areas must be free from impurities, oil, colour, ect. The material of the lifting point for welding is: 1.4462
- The position of the PSA INOX-ABA for 1-2 persons

must be carried out in such a way that unintended movement like turning or flipping will be avoided.

- The PSA INOX-ABA for 1-2 persons should be installed as follows:
 - Position above the user (this does not exclude other installation positions) reduces risk of tripping, the height of fall and swinging after a tumble.
 - the coupling element must be free moveable
 - the coupling element must not be loaded over edges
- Position PSA INOX-ABA for 1-2 persons into the load force direction (compare *Pic. 5 Dimensioning*).
- Check finally the correct assembly (see chapter 5 *Inspection / Repair / Disposal*).

4.2 Hints for the welding

Observe the following when preparing for welding:

- Clean the welding areas.
- Match the heat guidance during welding to the component geometry. A line energy of 1-3 kJ/mm is recommended.
- Limit interpass temperatures between 120 and 250°C.
- Avoid rapid cooling of the weld.
- For better austenite formation, it may be necessary to heat the workpiece to approx. 100°-120°C.
- The material can be welded with short-spray or impulse arc. The pulse technique is recommended.

4.3 Procedure for welding

The welding should only be carried out according to ISO 9606-1 or AWS Standards by an authorized welder.



HINT

Weld all seams in the same temperature.

Procedure:

- 1 Fasten provisionally, resp. start welding in the middle of the plate.
- 2 Before the closure weld is carried out, make sure that the bottom and all interlayers are cleaned carefully. Remove all visible flaw spots of the root and at the interlayers.
- 3 Weld the fillet weld circumferentially and without interruption at the base plate of the weld-on point.



HINT

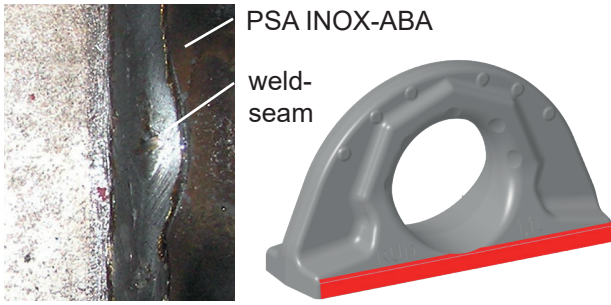
To avoid possible crevice corrosion, please weld the lifting point circumferentially! Please observe the current DIBt technical approval Z-30.3-6, paragraph 2.1.6.2, 2.1.6.3 und 2.1.6.4.



HINT

Due to the (forged) shape of the PSA INOX-ABA for 1-2 persons there will be a weld-seam changeover in the marked area (see *Pic. 1 A and B*). This has no impact on the

strength of the construction part!



Pic. 1:

A: weld-seam

B: area of the weld-seam-changeover

- 4 Please check by a competent person after welding the ongoing usage of the PSA INOX-ABA for 1-2 persons (see chapter 5 *Inspection / Repair / Disposal*).



HINT

By the position of the weld-seam (Fillet weld continuous) the following requirements will be observed: DIN 18800 steel constructions requires: at outdoor buildings or when strong corrosion must be expected weld seams must be carried out as continuous fillet weld seams.

4.4 User instructions

- Check frequently and before each initial operation the whole PSA INOX-ABA for 1-2 persons in regard of linger ability as a lifting mean, regarding corrosion, wear, deformation etc. (see chapter 5 *Inspection / Repair / Disposal*).



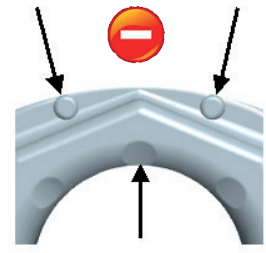
WARNING

Improper assembled or damaged PSA INOX-ABA for 1-2 persons and inappropriate use can result in deadly injury or lead to heavy injuries when load drops. Inspect PSA INOX-ABA for 1-2 persons before each use carefully!

- If there is any doubt about safe use or if the PSA INOX-ABA for 1-2 persons has been stressed by a fall and can therefore no longer rotate freely or is deformed, it must be withdrawn from use for safety reasons. A competent person must decide whether the PSA INOX-ABA for 1-2 persons can be used further on.
- Please check carefully the wear indicator markings of the PSA INOX-ABA for 1-2 persons (see Pic. 2):



No wear
Material above wear marks visible.



Use prohibited
Replacement criteria reached. Material all the way down to the wear lenses has gone

Pic. 2: Wear indicators

- When assembling equipment parts to form a fall protection system, ensure that the connecting element of the fall protection system is compatible with the PSA INOX-ABA for 1-2 persons.
- If the PSA INOX-ABA for 1-2 persons is used as part of a fall protection system, make sure that the following requirements are guaranteed: Devices must be used which are limiting the max. dynamical forces, which can occur to the user during a fall, to max. 6 kN.
- Care should be taken when selecting components of equipment to avoid any risk of injury to persons or damage of property. The safe function of a component or a compromised equipment must not be effected.
- Eliminate any damage of the PSA INOX-ABA for 1-2 persons for example caused by loading on sharp edges.
- The assembly of a PSA INOX-ABA for 1-2 persons to a coupling element must be done by using coupling elements according to EN 362 (Grade B and M), which have to free moveable to all sides. Any other grades are prohibited. Exception: Grade T is allowed, depending on the shape. Squeezing, tripping, shear and joint locations must be avoided. The coupling element must not be kinking when loaded.
- Karabiner hooks (connecting elements) according to DIN 5290 are prohibited.
- For a body harness (belt type) in a fall protection system only harness belts according to EN 361 must be used.
- Make sure when using fall arrest anchor systems that it is decisive for the safety of the user to guarantee that enough space below the working area is existing. In case of a fall there will be no impact at the ground or an obstacle be possible.
- Hook coupling element of the selected harness system into the eye of the PSA INOX-ABA for 1-2 persons and lock the coupling accordingly.

- Improper use of the PSA INOX-ABA for 1-2 persons cause limitations in regard of the usage period. The system must be inspected and controlled according to chapter 5 *Inspection / Repair / Disposal*.
- In addition to that please observe user instruction of all other components also.

5 Inspection / Repair / Disposal

5.1 Hints for the regularly inspection

The operator has to determine and dictate the necessary inspection periods and the deadlines by a risk assessment (see sections 5.2 and 5.3).

The persisting appropriateness of the PSA INOX-ABA for 1-2 persons must be checked by a competent person (auditor) at least once per year.

Depending on the conditions of use e.g. frequent use, increased wear or corrosion, it may be necessary to carry out inspections at shorter intervals than once per year. A verification is also required following damage and after special events.

The operator must specify the test cycles.

Please fill out the documentation card carefully and save it to write down regular inspections and possible repairings.

If necessary you can leave a mark at the component informing about the latest and up-coming inspection.

5.2 Inspection criteria for the regularly examination carried out by the operator

- The product identification at the PSA INOX-ABA for 1-2 persons must be high visible and easy to read.
- Completeness of the PSA INOX-ABA for 1-2 persons.
- Complete, readability of the Working Load Limit (WLL) as well as existing sign of manufacturer.
- Deformation on load bearing parts like basic body.
- Mechanical damages like notches, especially when located in areas of tensile stress.

5.3 Additional inspection criteria for the competent person resp. auditor

- strong corrosion
- Reduction of cross-section due to wear > 10 %
- Further tests may be necessary, depending on the results of the risk assessment (e.g. testing for cracks on load-bearing parts).

5.4 Hint for the maintenance

For cleaning the PSA INOX-ABA for 1-2 persons use only solvent- and acid-free cleaning supplies.

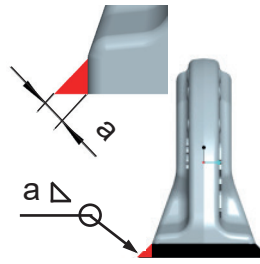
5.5 Disposal

Dispose worn out components / attachments or packaging according to the local waste removal requirements.

6 Tables

Type	size fillet weld	length	volume
PSA INOX-ABA for 1-2 persons (1.6 t)	a = 4	251 mm	4.016 cm ³

Table 2: Weld seam



Pic. 3: Welding seam position



HINT

Heat the work-piece to approx. 100°-120°C for better austenite formation.

Welding process	Welding filler metal
MAG 135	DIN EN ISO 14343: SG 22 9 3NL material number 1.4462
WIG 141	DIN EN ISO 14343: WSG 22 9 3NL material number 1.4462
Elektrode 111	DIN EN ISO 3581: E 22 9 3 L material number 1.4462
Cored wire 136, 138	DIN EN ISO 17633: T 22 9 3 L material number 1.4462

Table 3: Welding procedure and Welding filler metals



HINT

In welding procedures 111 and 136, welding consumables with basic character may have larger approval scopes.

The PSA INOX-ABA can be welded to these base materials:	
on austenitic-ferritic steels	1.4417; 1.4462 (DIN EN ISA 10088 part 2 and part 3)
on stainless steels	1.4301; 1.4404; 1.4435; 1.4541; 1.4550; 1.4571
on general structural steels (EN 10025)	S235; S275; S355
to high-temperature structural steels	16Mo3
Additional welding instructions	
Shielding gases	DIN EN ISO 14175: M1.2, I.1 **
Welding positions	PA, PB, PC, PF **
Weld metal untreated	Minimum values at 20°C (actual values are higher. Actual values can be taken from the approval data sheets.)
Yield strength R _{p0,2}	480 MPa
Ultimate tensile strength R _m	680 MPa
Elongation at fracture A ₅	25 %
Notched bar impact energy Av (ISO V at -60°C / >32 J)	40 J



HINT

Observe the respective processing instructions for the welding procedures and filler materials as well as the other welding instructions.

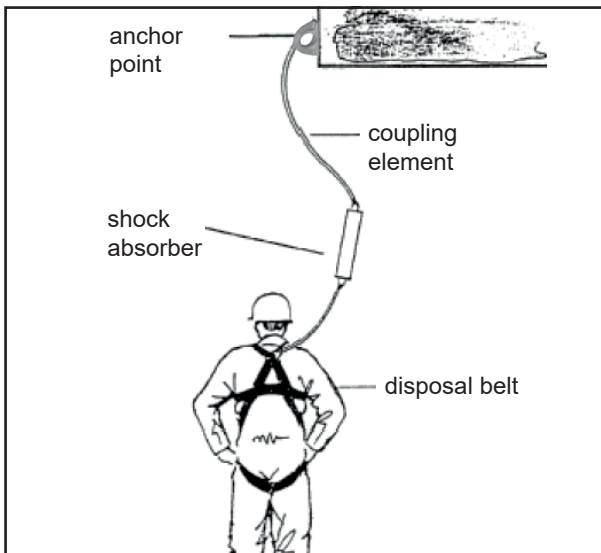


HINT

The actual material characteristics of the material batch to be processed are always to be taken from 3.1 or 3.2 acceptance test certificates according to DIN EN 10204.

** The scope of approval of the welding filler material used can be taken from the respective valid regulations (e.g. DIBt Z-30-3.6) and the valid approvals (e.g. VDTÜV, DB).

Table 4: Welding information

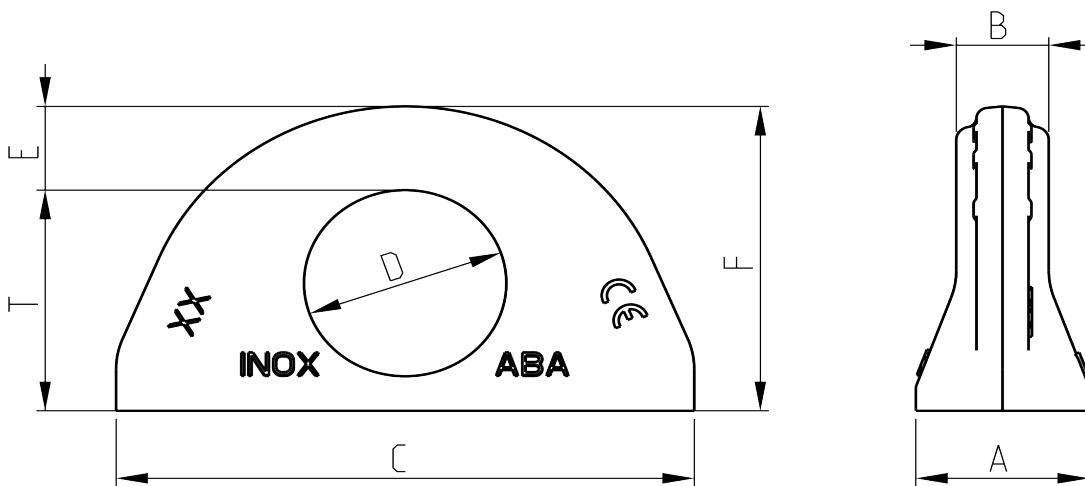


Pic. 4: Overview disposal system with shock absorber (source: BGR/GUV-R 198, 03/2011, page 13 picture 7)

PSA INOX-ABA incl. sticker - [1-2 persons]										
Type	WLL. [pers.]	weight [kg / pc.]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	T [mm]	Ref.-No.
PSA INOX-ABA incl. sticker	1-2	0.45	30	16	100	35	16	57	41.5	7914002

Table 5: Dimensioning

Subject to technical alterations



Pic. 5: Dimensioning

Anschlageinrichtung Persönliche Schutzausrüstung (PSA)		Fall Protection Anchorage Point Stop device
Typ	PSA-INOX- ABA 1-2 Pers	Type
Prüfgrundlagen	TS 16415/12 EN 795/12	Fundamental test principles
Hersteller		Manufacturer


Pic. 6: Sticker for PSA INOX-ABA for 1-2 persons available separately (RUD Ref.-No. 7914001)

7 Marking of the PSA INOX-ABA for 1-2 persons

The markings are according to DIN EN 365 „Personal fall protection gear“
– general requirements for user instructions and marking

For labelling see sticker (see Pic. 6).

8 Inspection card

Product						
Type		Trade name		Year of production		
Individual No. (if available)				Date of purchase		
Traceability code						
Manufacturer: RUD Ketten Rieger & Dietz GmbH u. Co. KG Friedensinsel, 73432 Aalen, Germany Manufacturer sling@rud.com / Tel. +49 7361 504-1370						
Sequence of regular inspections						
Date	Inspection	Repairing	OK	Detected fault	Name and signature of technical expert	Date of next regular inspection
 <p>Before PSA INOX-ABA for 1-2 persons will be used, please read user instruction carefully. Make sure that you understand all the substance. Non-observance of this instruction may cause serious personal injury and/or damage to property!</p>						