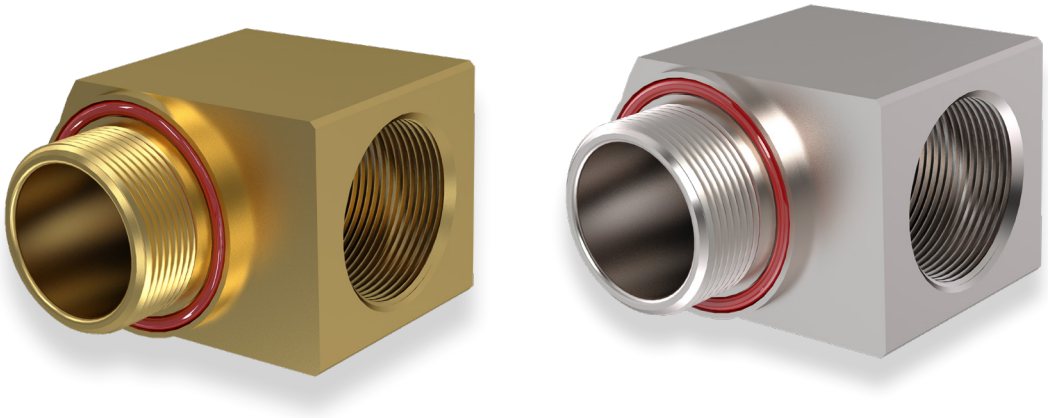

IMPORTANT!
Read this instruction carefully before installing the product

TRANBERG STAHL
THE STRONGEST LINK.

TRANBERG® ADAPTORS

TEF 663 Fixed Angle Adaptor
Zone 1, Zone 2 & Safe Area

USER MANUAL

R. STAHL TRANBERG AS
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USER MANUAL

TEF 663 Fixed Angle Adaptor

Zone 1, Zone 2 & Safe Area

General Information

Manufacturer

R. STAHL TRANBERG AS

Web stahl-tranberg.com

Main office:

Strandsvingen 6

N-4032 Stavanger

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T +47 51 57 89 00

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N-1470 Lørenskog

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About these operating instructions:

- Read these operating instructions, especially the safety notes, carefully before use.
- Observe all other applicable documents (See also further documents section).
- Keep the operating instructions throughout the service life of the device.
- Make the operating instructions accessible to operating and maintenance personnell at all times.
- Pass the operating instructions on to each subsequent owner or user of the device.

Document no: TUM4513

R. Stahl Tranberg Revision: E

Further documents for this product:

- Datasheet TEF 663, TPS4440
- ATEX Certificate 13ATEX 1553X
- IECEx Certificate, IECEx NEM 13.0025X
- Declaration of Conformity (DoC), TDC4875

USER MANUAL

TEF 663 Fixed Angle Adaptor

Zone 1, Zone 2 & Safe Area

Technical Data	
Ex protection	Ex II 2 G Ex eb IIC
Ingress Protection	IP 66/67
Ambient temperature	-60°C to +135°C
Thread length	15mm
Certificates	IECEx NEM 13.0025X & NEMKO 13ATEX 1553X
Material housing	Brass or stainless steel (AISI 316/ EN 1.14404)
Material sealing	Silicone o-ring

Applications

- Outdoor or indoor use in marine, offshore and industrial environments.
- Can for example be used in already existing cable glands instead of changing the hole diameter in the enclosure.
- Suitable for use in hazardous areas, zone 1, zone 2 and safe area.

Tools required

- Wrench according to size of cable gland

Content in box

- The product is fully assembled, and ready for installation.

Safety precautions

Note that changes made to the product and / or installation of components which do not conform to the approval, may be a safety violation. The manufacturer will in no circumstance be held responsible for such activity.

For your health and safety, alway use safety gear suited for the task. Be certain to follow codes, regulations and/or specific procedures tha are related to the installation.

To ensure IP66/67, make sure that the o-ring seal is in good contact with the enclosure wall. There shall be no gap between the adaptor and the enclosure wall.

To ensure this, we recommend a chamfer of the threads in any threaded enclosure of 1-1,5mmx45°.

If the chamfer is too small, the insertion of the gland may be difficult or impossible, and if the chamfer is too large, the o-ring seal may not seal properly with the enclosure wall.

It is the installer`s responsibility to verify that the seal after installation is sufficient for both clearance holes and threaded holes.

Special conditions for use

- Only one adaptor is permitted for each cable entry. Blanking elements shall not be used with adators.

Maintenance instructions

- The product should be inspected according to company routines and/or relevant to national regulations for your country.

Approvals

Compliance standards:
Directive 2014/34/EU

IEC 60079-0-*

IEC 60079-7-*

IEC 60079-1-*

** Refer to EU Declaration of conformity for more details.*

- ATEX Certificate 13ATEX 1553X
- IECEx Certificate, IECEx NEM 13.0025X

USER MANUAL

TEF 663 Fixed Angle Adaptor

Zone 1, Zone 2 & Safe Area

Conditions for holes

		Threaded holes	Clearance holes
1	Tolerance class	Mxx (6H) is required for Ex d and recommended for Ex e. Tolerance class for Ex e is max. 6G/6H. Ref. ISO 965-1 and ISO 965-3	Nominal thread size -0,0mm/ +0,2mm
2	Enclosure material limitations	Brass adaptors should not be installed in zinc or aluminum enclosures outdoor or in humid environments.	Brass adaptors should not be installed in zinc or aluminum enclosures outdoor or in humid environments.
3	Enclosure interface sealing method	o-ring	o-ring
4	Maximum surface roughness of the enclosure face for sealing	Ra 6,4µm, better than 3,2µm is recommended.	Ra 6,4µm, better than 3,2µm is recommended.
5	Thickness range for the enclosure wall	Less than the thread length of the cable gland.	Thread length minus 6mm (Thread L 9mm -6mm = 3mm & Thread L 15mm-6mm= 9mm)
6	Perpendicularity	+/-1° or 0,2mm at the outer edge of the gland, whichever is SMALLER.	+/-1° or 0,2mm at the outer edge of the gland, whichever is SMALLER.
7	Permitted use and location of any earth tags	Earth tags should be installed on the inside of the enclosure. Thickness of tag and lock nut to be included in the thickness consideration in point 5.	Earth tags should be installed on the inside of the enclosure. Thickness of tag and lock nut to be included in the thickness consideration in point 5.
8	For chamfered holes	The outermost edge must not have a greater diameter than the center of the O-ring.	The outermost edge must not have a greater diameter than the center of the O-ring.
9	Lock nuts	Use only TRANBERG ® locking nuts, or other types recommended by the manufacturer	Use only TRANBERG ® locking nuts, or other types recommended by the manufacturer

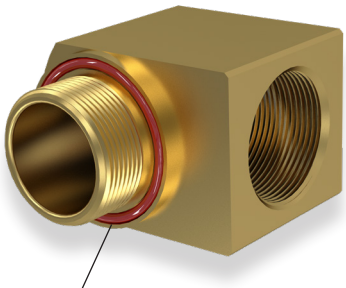
Installation Instructions

Before installing the component, ensure that:

- The adaptor is installed according to the instructions required by the standard and will not invalidate the specific characteristics of the Ex protection of the electrical equipment on which they are mounted.
- The adaptor is not damaged.
- The o-ring/gasket is not damaged and that the gasket bearing areas are flat.

Installation:

1. For adaptors with o-ring seal, check that the o-ring is fixed into the recessed slot.
2. When used in a sheet metal enclosure, use a lock nut inside the enclosure to fasten the adaptor.
3. Screw the adaptor fully into the threads and tighten it with a wrench.
4. Install the required gland into the angle adaptor.



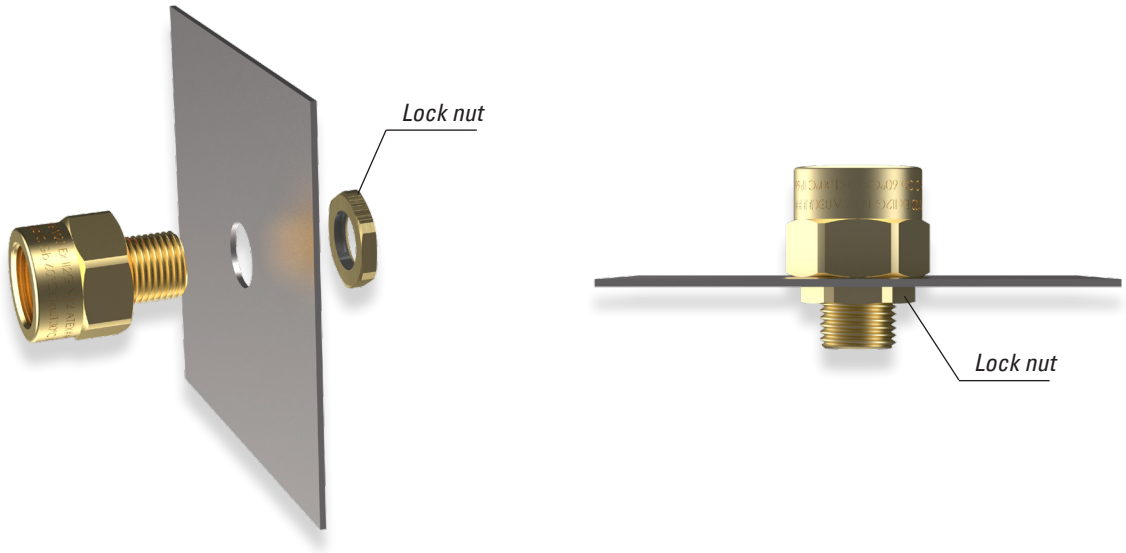
O-ring fixed in recessed slot

USER MANUAL

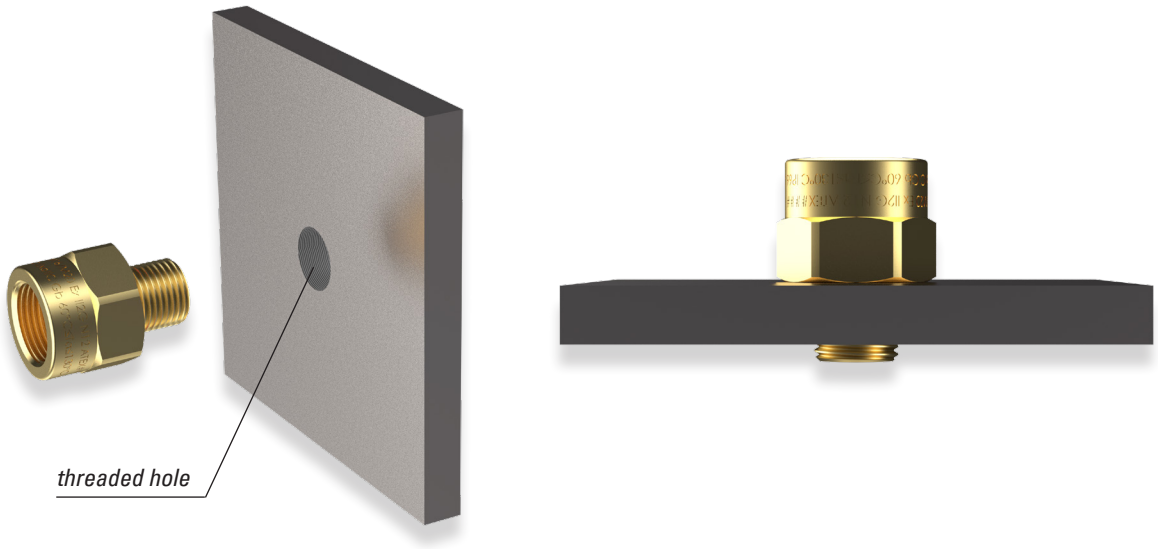
TEF 663 Fixed Angle Adaptor

Zone 1, Zone 2 & Safe Area

Assembly in hole without threads:



Assembly in hole with threads:



Tightening Torque Gland Body and Lock Nut (if applicable)

Gland size	Torque (Nm)
M20	20
M25	25
M32	32

TUM4513 REV. E 04.03.2021

STAHL TRANBERG

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EU Declaration of Conformity
EU-Konformitätserklärung
Déclaration de Conformité UE

STAHL TRANBERG

R. Stahl Tranberg AS • Strandsvingen 6 • 4032 Stavanger • Norway
declares in its sole responsibility, *erklärt in alleiniger Verantwortung, déclare sous sa seule responsabilité,*

that the product: *dass das Produkt:* *que le produit:*	TEF 793/794 Blanking plugs and TEF 66* Adaptors
Type(s), *Typ(en), type(s):*	**TEF 793/-4, TEF 66*/-0/-1/-2/-3/-4/-5**

is in conformity with the requirements of the following directives and standards.
mit den Anforderungen der folgenden Richtlinien und Normen übereinstimmt.
est conforme aux exigences des directives et des normes suivantes.

Directive(s) / *Richtlinie(n) / Directive(s)*	***Standard(s)*** / *Norm(en) / Norme(s)*
2014/34/EU **ATEX Directive** *2014/34/EU* *ATEX-Richtlinie* *2014/34/UE* *Directive ATEX* (OJ L 96, 29.3.2014, p. 309–356)	EN 60079-0:2018 EN 60079-1:2014 EN 60079-7:2015 EN IEC 60079-7:2015/A1:2018
Marking, *kennzeichnung, marquage:*	**II 2 G Ex eb IIC** **II 2 G Ex db IIC** CE 0470
EC/EU Type Examination Certificate: *EG/EU-Baumusterprüfbescheinigung:* *Attestation d'examen CE/UE de type:*	**Nemko 13ATEX1553 X** (DNV GL Nemko Presafe AS Veritasveien 3, 1363 Høvik, NORWAY – NB2460)
2014/35/EU: **Low Voltage Directive** *2014/35/EU* *Niederspannungsrichtlinie* *2014/35/UE:* *Directive Basse Tension*	
2014/30/EU **EMC Directive** *2014/30/EU* *EMV-Richtlinie* *2014/30/UE* *Directive CEM* (OJ L 96, 29.3.2014, p. 79–106)	***Not applicable according to article 2, paragraph 2.*** **Nicht zutreffend nach Artikel 2, Absatz 2.** ***Non applicable selon l'article 2, paragraphe 2.***
2011/65/EU **RoHS Directive** *2011/65/EU* *RoHS-Richtlinie* *2011/65/UE* *Directive RoHS* (OJ L 174, 01.07.2011, p. 88–110)	EN IEC 63000:2018
The technical documentation for this equipment is retained at the following address *Die technische Dokumentation für dieses Gerät wird unter folgender Adresse aufbewahrt* *La documentation technique de cet équipement est conservée à l'adresse suivante*	R. Stahl Tranberg AS, Strandsvingen 6, 4032 Stavanger, Norway.

Stavanger, 03.03.2021
Place and date
Ort und Datum
Lieu et date

Alf Kristoffer Askildsen
Discipline Lead, Mechanics

Kjell Are Berg Hagen
Quality & HSE Manager