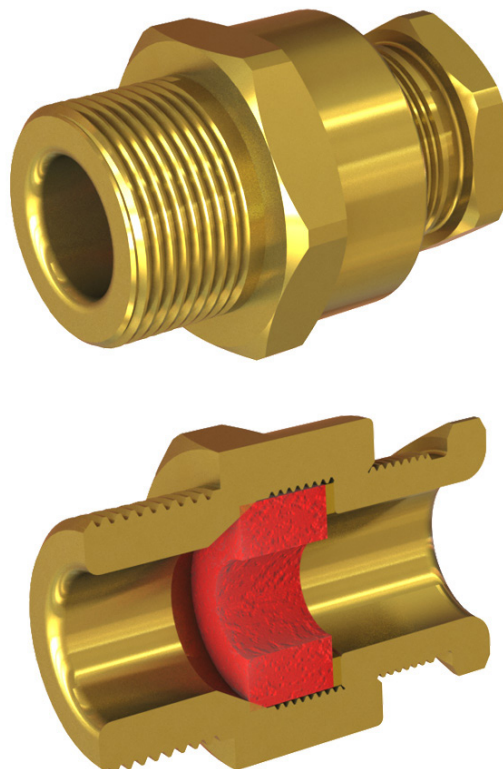


E204 - 622



E205 - 624

IMPORTANT!

Read this instruction carefully before installing the product



TRANBERG

STAHL

THE STRONGEST LINK.

TRANBERG® CABLE GLANDS

TEF E204-622 Ex e Cable Gland

TEF E205-624 Ex e Cable Gland

Zone 1, Zone 2 & Safe Area

USER MANUAL

R. STAHL TRANBERG AS

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USER MANUAL

TEF E204-622 Cable Gland

TEF E205-624 Cable Gland

Zone 1, Zone 2 & Safe Area

General Information

Manufacturer

R. STAHL TRANBERG AS

Web stahl-tranberg.com

Main office:

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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: TUM4302

R. Stahl Tranberg Revision: I

Further documents for this product:

- Datasheet E204-622, TPS3971
- Datasheet E205-624, TPS3970
- ATEX Certificate 13ATEX 1548X
- IECEx Certificate, IECEx NEM 13.0021X
- Declaration of Conformity (DoC), TDC4616

USER MANUAL

TEF E204-622 Cable Gland

TEF E205-624 Cable Gland

Zone 1, Zone 2 & Safe Area

Technical Data	
Ex protection	II 2 G Ex eb IIC
Ingress Protection	IP 66/67
Ambient temperature	-60°C to +135°C
Thread length E204-622	9mm and 15mm (from M40 upwards only 15mm)
Thread length E205-624	15mm
Certificates	IECEX NEM 13.0021X NEMKO 13ATEX 1548X
Material housing	Brass or stainless steel (AISI 316/ EN 1.14404)
Material sealing and gasket E204-622 gland	Silicone
Material sealing and gasket E205-624 gland	Silicone sealing and PTFE gasket
Cable type	Unarmoured and braided
Sealing technique	Silicone gasket
Sealing areas	Cable outer sheath

Applications

- Outdoor or indoor for unarmoured and braided cables.
- Sealing on cables outer sheath only.
- 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, always use safety gear suited for the task. Be certain to follow codes, regulations and/or specific procedures that are related to the installation.

To ensure IP66/67, make sure that the o-ring seal or the PTFE gasket is in good contact with the enclosure wall. There shall be no gap between the cable gland and the enclosure wall when an o-ring is used, and no gap between the PTFE washer and the enclosure wall or the cable gland when a PTFE washer is used.

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

- Additional clamping of the cable shall be installed to ensure that pulling and twisting is not transmitted to the terminals.

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-*

* Refer to EU Declaration of conformity for more details.

- ATEX Certificate 13ATEX 1548X
- IECEX Certificate, IECEX NEM 13.0021X

USER MANUAL

TEF E204-622 Cable Gland

TEF E205-624 Cable Gland

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 glands should not be installed in zinc or aluminum enclosures outdoor or in humid environments.	Brass glands should not be installed in zinc or aluminum enclosures outdoor or in humid environments.
3	Enclosure interface sealing method	o-ring for E204-622 and PTFE gasket for E205-624	o-ring for E204-622 and PTFE gasket for E205-624
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:

- Cable glands shall be installed according to the instructions required by the standard and shall not invalidate the specific characteristics of the Ex protection of the electrical equipment on which they are mounted.
- The cable gland is not damaged.
- The o-ring/gasket is not damaged and that the gasket bearing areas are flat.
- The cable diameter is within the clamping area of the sealing ring.

Installation:

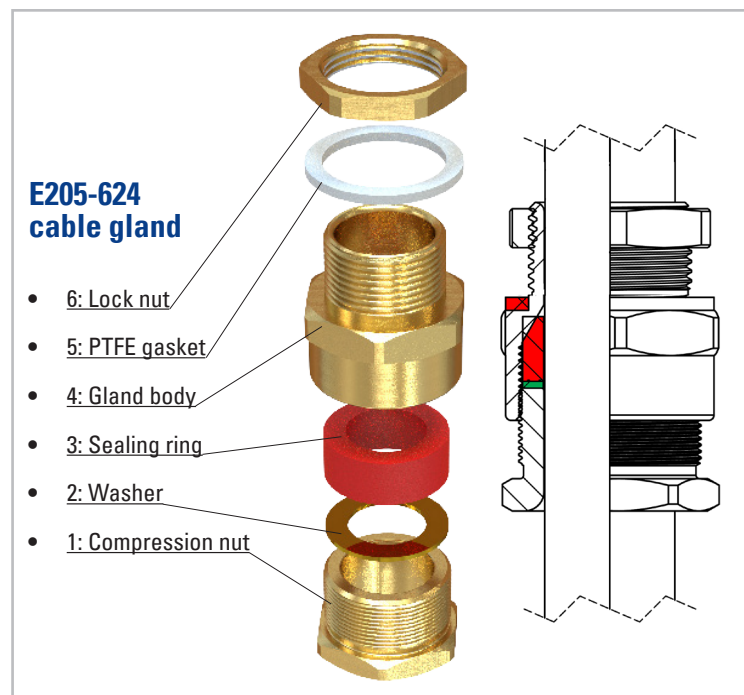
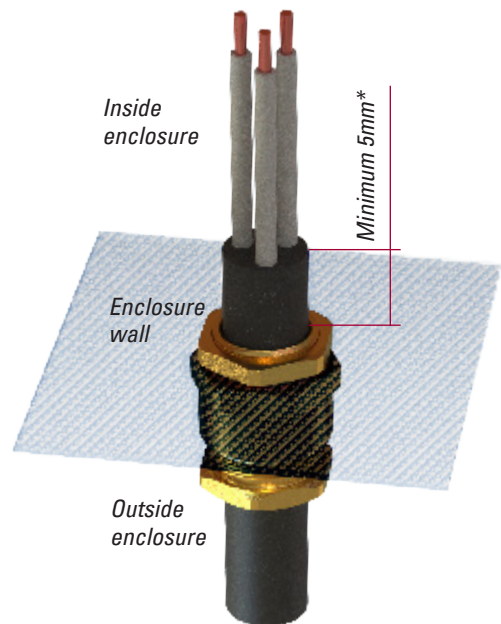
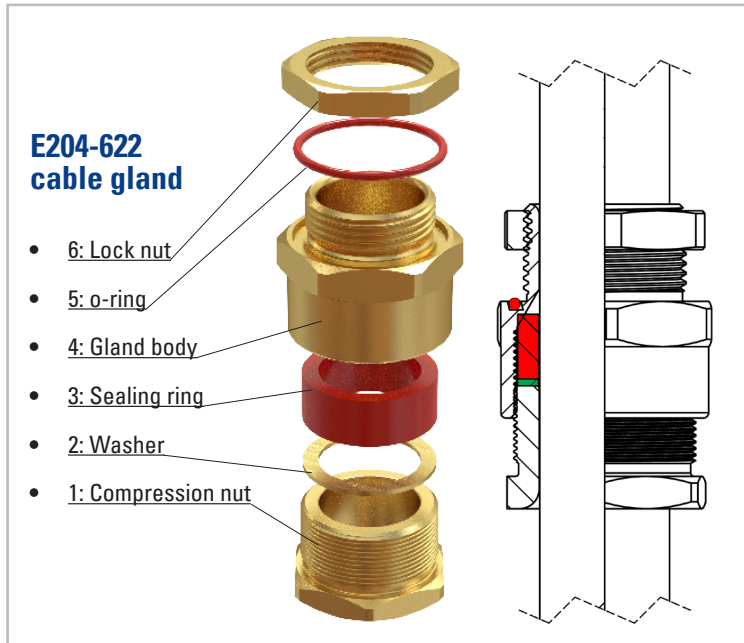
1. Screw the gland body (4) into the enclosure and tighten it with a wrench. For tightening torque see the table on the last page in this user manual. When used in a sheet metal enclosure, use a lock nut inside the enclosure to fasten the gland body. For the E205-624 series, use a PTFE gasket (6) between the gland body and the enclosure.
2. Place the compression nut (1) over the cable.
3. Place the washer (2), then the sealing ring (3) over the cable.
4. Carefully cut back the outer sheath of the cable to suit the equipment. * It is recommended to leave a minimum of 5mm outer sheath inside the enclosure.
5. Feed the conductors through the gland body (4). Conductors and outer sheath goes through the connector(4) and into the enclosure.
6. Press the sealing ring (3) and washer (2) into the gland body (4) by hand.
7. Use a wrench to fully tighten the compression nut (1). For tightening torque see the table on the last page in this user manual. Make sure the sealing ring is tight against the cable.
8. Pull the cable to make sure the sealing ring tightens around the cable.

USER MANUAL

TEF E204-622 Cable Gland

TEF E205-624 Cable Gland

Zone 1, Zone 2 & Safe Area



Tightening torque gland body & lock nut

Gland size	Torque (Nm)
M16	16
M20	20
M25	25
M32	32
M40	40

Tightening torque compression nut

Sealing ring code	Torque (Nm)
A1	3
B1	3
B2	5
C1	5
C2	5
C3	5
D1	8
D2	8
D3	10
D4	10
D5	10
D9	8
E1	15
E2	15
F1	15
F2	15
G1	40
G2	40
H1	40
I1	50
I2	40
J1	70
J2	40
K1	70
K2	50
L1	70
L2	70
L3	50
L4	50
M1	50
M2	50
N1	70
N2	70
O1	70
O2	70
O3	70
O4	70

Tightening torque gland body & lock nut

Gland size	Torque (Nm)
M50	50
M63	63
M75	75
M90	90

Tightening torque compression nut

Sealing ring code	Clamping range
A1	2,0-6,0 mm
B1	5,0-9,1 mm
B2	4,5-7,5 mm
C1	9,0-14,3 mm
C2	6,0-10,0 mm
C3	8,5-13,0 mm
D1	15,0-20,1 mm
D2	11,0-15,0 mm
D3	5x11 mm
D4	5x13 mm
D5	5x15 mm
D9	13,0-17,0 mm
E1	20,0-23,0 mm
E2	18,0-20,1 mm
F1	26,5-32,4 mm
F2	23,0-29,0 mm
G1	32,0-38,5 mm
G2	29,0-35,0 mm
H1	35,0-41,0 mm
I1	40,0-44,5 mm
I2	38,4-43,0 mm
J1	44,0-50,5 mm
J2	42,0-46,0 mm
K1	50,0-56,5 mm
K2	47,0-53,0 mm
L1	55,0-59,0 mm
L2	58,0-63,0 mm
L3	53,0-58,0 mm
L4	56,0-62,0 mm
M1	62,0-68,0 mm
M2	60,0-66,0 mm
N1	68,0-72,0 mm
N2	65,0-70,0 mm
O1	72,0-78,0 mm
O2	78,0-83,0 mm
O3	69,0-75,0 mm
O4	75,0-81,0 mm

EU Declaration of Conformity
EU-Konformitätserklärung
Déclaration de Conformité UE

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: <i>dass das Produkt:</i> <i>que le produit:</i>	Cable glands <i>Kabel- und leitungseinführung</i> <i>Entrées de câbles</i>
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Type(s), Typ(en), type(s):	TEF E204/E205
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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	EN 60079-0:2018
<i>2014/34/EU</i>	<i>ATEX-Richtlinie</i>	EN 60079-7:2015
<i>2014/34/UE</i>	<i>Directive ATEX</i>	EN IEC 60079-7:2015/A1:2018

Marking, kennzeichnung, marquage:	 II 2 G Ex eb IIC	CE 0470
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EC/EU Type Examination Certificate: <i>EG/EU-Baumusterprüfbescheinigung:</i> <i>Attestation d'examen CE/UE de type:</i>	NEMKO 13 ATEX 1548X (Nemko AS, Gaustadalléen 30, 0373 OSLO - Norway)
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2014/35/EU: Low Voltage Directive <i>2014/35/EU Niederspannungsrichtlinie</i> <i>2014/35/UE: Directive Basse Tension</i>	N/A
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2014/30/EU EMC Directive <i>2014/30/EU EMV-Richtlinie</i> <i>2014/30/UE Directive CEM</i>	N/A
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2011/65/EU RoHS Directive <i>2011/65/EU RoHS-Richtlinie</i> <i>2011/65/UE Directive RoHS</i>	EN IEC 63000:2018
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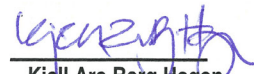
The technical documentation for this equipment is retained at the following address

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

TUM4302 REV. H 09.01.2023 Subject to change without prior notice