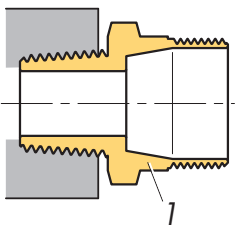


ATTENZIONE Pressacavi in alluminio: prima di riassemblare pulire e ingrassare tutte le filettature.
WARNING Aluminium Cable Glands: before re-assembling, clean and lubricate all threads.
ATTENTION Presse-étoupes en aluminium: avant de les remonter, nettoyer et graisser tous les filetages.
ACHTUNG Bei Kabelverschraubungen in Aluminium vor dem Widerzusammenbau alle Gewinde reinigen und einfetten.

1°



Per modo di protezione "d" o "e"
 Avvitare il corpo 1 nell'apparecchiatura o...

For "d" and "e" protection modes
 Screw the body 1 to the device or...

Pour mode de protection "d" ou "e"
 Visser le corps 1 dans l'outil ou...

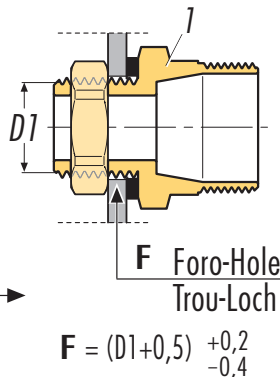
Für den Schutzmodus "d" oder "e"
 den Körper 1 in die Vorrichtung
 einschrauben oder...

Per modo di protezione "e"
 ...fissare con dado in caso
 di foro passante

For "e" protection mode
 ...secure with a nut in the case of hole

Pour mode de protection "e"
 ...fixer avec un écrou dans
 le cas de trou de passage

Für den Schutzmodus "e"
 ...mit der Schraubenmutter
 fixieren im Falle einer Lochschleufe



Per pressacavi serie RN - RNT - RNC - RNM - RNA • For RN - RNT - RNC - RNM - RNA series cable glands
Pour presse-étoupes séries RN - RNT - RNC - RNM - RNA • Für kabelverschraubungen serie RN - RNT - RNC - RNM - RNA

• nell'esempio grafico è raffigurata la serie RN • the image represents the RN series • les schémas représentent la série RN • im Beispiel in der Grafik ist die Serie RN dargestellt

2° Inserire la parte terminale del cavo nei particolari 5, 3, 2 e poi attraverso il corpo 1 (già fissato).

Insert the end section of the cable to particulars 5, 3, 2 and then through the body 1 (already secured).

Placer la partie finale du câble dans les pièces 5, 3, 2 et ensuite dans le corps 1 (déjà fixé).

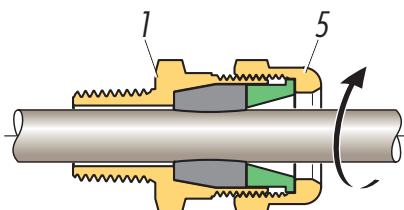
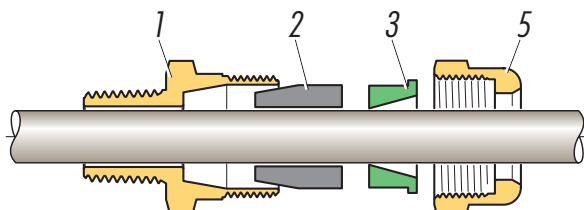
Das Endteil des Kabels in die Details 5, 3, 2 und dann durch den Körper 1 (schon fixiert) einführen.

3° Avvitare la testina 5 sul corpo 1 (vedi Tab. 1 Coppie di serraggio) e serrare fino al bloccaggio del cavo.

Screw the backnut 5 to the body 1 (see on Tab.1 Suggested tightening torques) and tighten until locking the cable.

Visser la tête 5 sur le corps 1 (voir sur Tabl.1 Couples de serrage suggérés) et serrer jusqu'au blocage du corps.

Den Kopf 5 auf den Körper 1 (siehe Tab.1 Empfohlene Anzugsmomente) einschrauben und diesen zusammenpressen bis die Blockierung des Kabels erreicht ist.



Per pressacavi serie RAT - RAC - RAM - RAS - RAA • For RAT - RAC - RAM - RAS - RAA series cable glands
Pour presse-étoupes séries RAT - RAC - RAM - RAS - RAA • Für kabelverschraubungen serie RAT - RAC - RAM - RAS - RAA

• nell'esempio grafico è raffigurata la serie RAM • the image represents the RAM series • les schémas représentent la série RAM • im Beispiel in der Grafik ist die Serie RAM dargestellt

2° Inserire la parte terminale del cavo nei particolari 5 e 4 (sopra l'armatura).

Insert the end section of the cable to particulars 5 and 4 (above armour).

Placer la partie finale du câble dans les pièces 5 et 4 (sur l'armure).

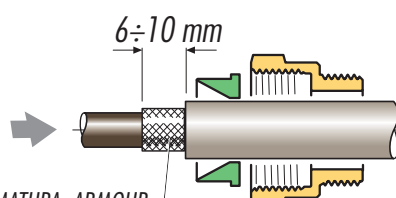
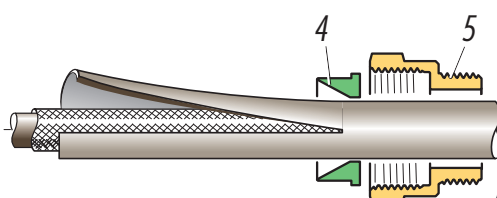
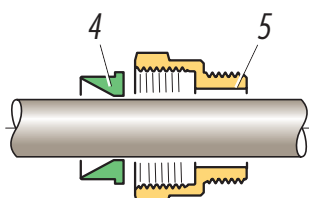
Das Endteil des Kabels in die Details 3 und 4 einführen (über der Armierung).

3° Rimuovere la guaina esterna del cavo e tagliare l'armatura per una lunghezza di 6-10 mm oltre il taglio della guaina.

Remove the cable's external sheathing and cut the armour to a length of 6-10 mm in addition to the cut sheathing.

Enlever la gaine externe du câble et couper l'armure sur une longueur de 6 à 10mm au-delà de la coupure de la gaine.

Den äußeren Kabelmantel entfernen und die Armierung auf eine Länge von 6-10 mm schneiden, über den Schnitt des Kabelmantels hinaus.



ARMATURA ARMOUR
 ARMURE ARMIERUG

4° Inserire i particolari 3 e 2 sul cavo sottoarmatura e la parte terminale del cavo nel corpo 1 (già fissato).

Insert the particulars 3 and 2 to the cable's internal sheath and the end section of the cable, body 1 (already secured).

Enfiler les pièces 3 et 2 sur le câble sous l'armure et la partie finale du câble dans le corps 1 (déjà fixé).

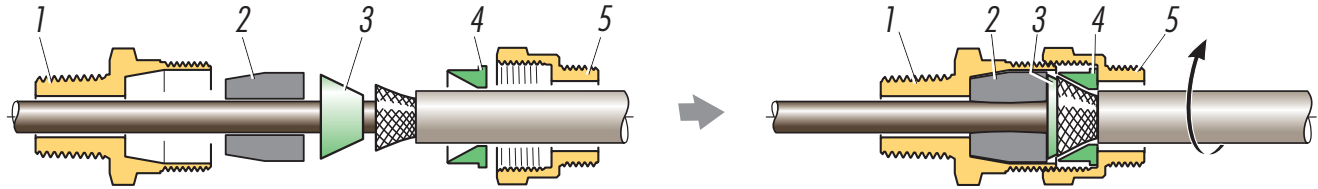
Die Details 3 und 2 auf dem Kabel an die untere Armierung und das Endteil des Kabels im Körper 1 einführen (schon fixiert).

5° Avvitare l'intermedio 5 sul corpo 1 (vedi Tab. 1 Coppie di serraggio) e serrare fino al bloccaggio dell'armatura tra i particolari 3 e 4 e del cavo tramite il gommino 2.

Screw the middle 5 to the body 1 (see on Tab.1 Suggested tightening torques) and tighten until locking the armour between particulars 3 and 4 and the cable with rubber seal 2.

Visser l'intermédiaire 5 sur le corps 1 (voir sur Tab.1 Couples de serrage suggérés) et serrer jusqu'au blocage de l'armure entre les pièces 3 et 4 et du câble avec le caoutchouc 2.

Das Zwischenstück 5 auf dem Körper 1 (siehe Tab.1 Empfohlene Anzugsmomente) anschrauben und diesen zusammenpressen bis die Blockierung zwischen 3 und 4 und des Kabels mittels des Gummistöpsels 2 erreicht ist.



Per pressacavi serie RAD - RAA - RALD - RATD • For RAD - RAA - RALD - RATD series cable glands
Pour presse-étoupes séries RAD - RAA - RALD - RATD • Für kabelverschraubungen serie RAD - RAA - RALD - RATD

• nell'esempio grafico è raffigurata la serie RAD • the image represents the RAD series • les schémas représentent la série RAD • im Beispiel in der Grafik ist die Serie RAD dargestellt

2° Inserire la parte terminale del cavo nei particolari 8, 7, 6, 5 e 4 (sopra l'armatura).

Insert the end section of the cable to the particulars 8, 7, 6, 5 and 4 (above armour).

Enfiler la partie finale du câble dans les pièces 8, 7, 6, 5 et 4 (sur l'armure).

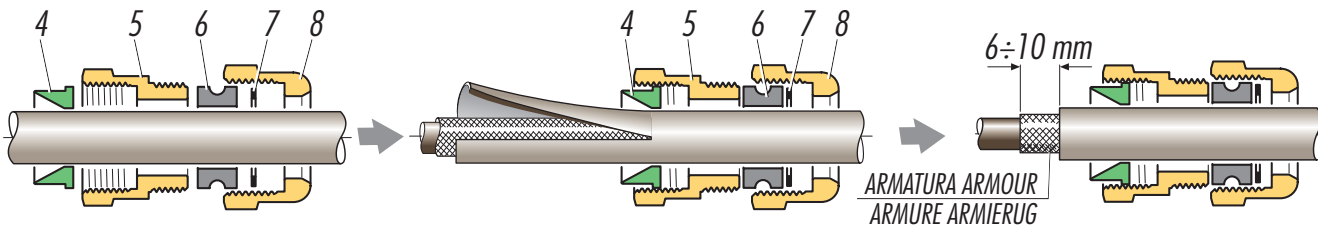
Das Endteil des Kabels in die Details 8, 7, 6, 5 und 4 einführen (über der Armierung).

3° Rimuovere la guaina esterna del cavo e tagliare l'armatura per una lunghezza di 6-10 mm oltre il taglio della guaina.

Remove the cable's external sheathing and cut the armour to a length of 6-10 mm in addition to the cut sheathing.

Enlever la gaine externe du câble et couper l'armure sur une longueur de 6 à 10mm au-delà de la coupure de la gaine.

Den äußeren Kabelmantel entfernen und die Armierung auf eine Länge von 6 - 10 mm schneiden, über den Schnitt des Kabelmantels hinaus.



4° Inserire i particolari 3 e 2 sul cavo sottoarmatura e la parte terminale del cavo nel corpo 1 (già fissato).

Insert the particulars 3 and 2 to the cable's internal sheath and the end section of the cable, body 1 (already secured).

Enfiler les pièces 3 et 2 sur le câble sous l'armure et la partie finale du câble dans le corps 1 (déjà fixé).

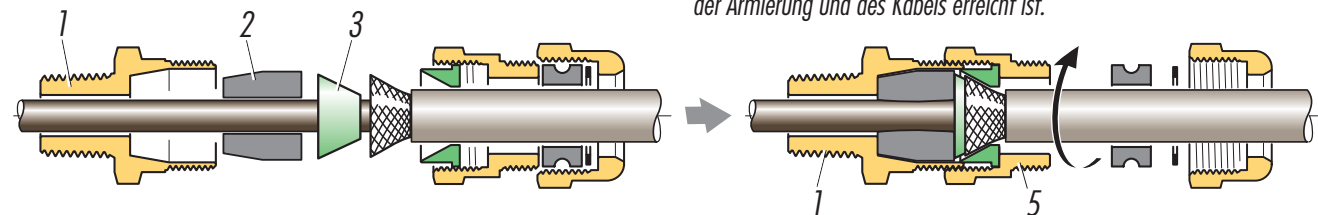
Die Details 3 und 2 auf dem Kabel der unteren Armierung und das Endteil des Kabels in der Körper einführen (schon fixiert).

5° Avvitare l'intermedio 5 sul corpo 1 (vedi Tab. 1 Coppie di serraggio) e serrare fino al bloccaggio dell'armatura e del cavo.

Screw the middle 5 to the body 1 (see on Tab.1 Suggested tightening torques) and tighten until locking the armour and cable.

Visser l'intermédiaire 5 sur le corps 1 (voir sur Tab.1 Couples de serrage suggérés) et serrer jusqu'au blocage de l'armure et du câble.

Das Zwischenstück 5 auf dem Körper 1 (siehe Tab.1 Empfohlene Anzugsmomente) einführen und dieses zusammenpressen bis die Blockierung der Armierung und des Kabels erreicht ist.

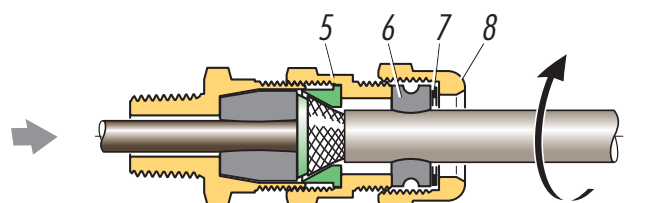


6° Posizionare il gommino esterno 6, l'anello 7 ed avvitare la testa 8 sull'intermedio 5 fino al bloccaggio.

Position the external rubber seal 6, ring 7 and screw the backnut 8 to the middle 5 until locked.

Placer le caoutchouc externe 6, l'anneau 7 et visser la tête 8 sur l'intermédiaire 5 jusqu'au blocage.

Den äußeren Gummistöpsel positionieren, den Ring 7 und den Kopf 8 auf das Zwischenstück 5 schrauben bis die Blockierung erreicht ist.



EQUIPMENT SERIES

Cable gland series: RN, RNT, RAT, RNC, RNM, RNA, RAC, RAM, RAS, RAD, RAA, RALD, RATD;

ATEX Certificate: INERIS 06 ATEX0014X, IEC Ex Certificate: INE 10.0010X.

• Cable glands for the above-mentioned series are suitable for unarmored or armored cables, flat twin cables or tape and for all of the cable entries a part of the electrical equipments of groups I and II, category M2 or II 2 GD (ATEX Directive), with protection modes Ex e I, Ex d I, Ex d IIA/IIB/IIC, Ex e II and Ex tb IIIC Db (ATEX Directive and IEC Ex Scheme); ambient temperature range: -40°C/+100°C with EPDM or Neoprene rubber seals, -65°C/+220 °C with SILICONE seals.

• Ex d IIC / Ex e II / Ex tb IIIC Db / Ex d I / Ex e I execution in accordance with Standards EN 60079-0:2012/A11:2013 / EN 60079-1:2007 / EN60079-7:2007 / EN60079-31:2009 / EN60529:1991 (ATEX), IEC 60079-0:2011, IEC 60079-1:2007, IEC 60079-7:2006, IEC 60079-31:2008, IEC 60529:2001 (IEC Ex).

• The cable glands degree of protection is IP66 or IP66/68, 30 meters deep for 7 days according to the EN 60529 standard; the degree of protection IP 68 is obtained by using flat sealing rings on cable glands with cylindrical threads. Without gaskets, the degree of protection is IP 66. If the cable glands have cylindrical or conical threads and are screwed on the threaded hole of an apparatus, in order to guarantee an IP66 or IP66/68 degree of protection, threaded parts must be sealed with Loctite or similar. In order to maintain the IPX8 degree of protection, the cable entry shall be fitted on enclosure which satisfies an immersion test under 30 meters of water during 7 days.

Metric cable glands are made in accordance to EN 50262 Standard.

INSTALLATION

• These products must be installed according to the requirements of Standards IEC EN 60079-14 or other national laws or standards.

The EU type certificate does not cover uses different from what is described in the requirements.

• Verify the suitability of the cable glands in respects to the installation zone, group, category, temperature class, gas group and ambient temperatures.

• User must be aware of the risks related to electrical current and chemical / physical characteristics of the gases and / or vapors and of the dust present in the plant.

• Assembly and tightening of the cable glands have not to compromise the degree of protection.

• You must use only RCN original spare parts and accessories, in accordance with the certificate.

• Verify the integrity and the continuity of the earthing, protection and equipotential conductors.

• On Ex d enclosures, the length of the engaged parallel threads must be ≥5 mm on enclosures with a volume <100 cm³, and ≥8 mm if the volume is >100 cm³. Engaged threads must be ≥5. On conical threaded joints, the threads for each part must be ≥6, considering the maximum tolerance accepted, the real number of engaged threads, might be less than 5. Check the cable diameter range printed onto the rubber seal, and choose the suitable cable.

SPECIAL CONDITIONS FOR SAFE USE

• The cable glands and rubber seals must be suitable for installed cables diameter, sized according to the nominal current intensity allowed in the electrical circuits.

• In accordance to the certificate's descriptive documentation, the clamping of the cables, for the cable entries size 63 and higher must be realized outside of the enclosure, nearby to the enclosure on which the cable glands are installed.

MARKING

RCN (Type) (Thread) Ex d I / Ex e I Mb / Ex d IIC / Ex e IIC Gb / Ex tb IIIC Db IP66/68 CE 0080 IEC Ex INE 10.0010X-INERIS 06ATEX0014X IM2/II2GD

REDUCED MARKING

RCN (Type) (Thread) IEC Ex INE 10.0010X Ex e/d I Mb IIC Gb Ex tb IIIC Db IP66/68 CE 0080 INERIS 06ATEX0014X IM2/II2GD

Trademark

Protection mode

- Ex d IIC / Ex e IIC (gas)
- Ex d I / Ex e I (mine)
- Ex tb IIIC (dust)
- Mb (mine)
- Gb (gas - zone 1)
- Db (combustible dust - zone 21)
- IP 66 or IP 66/68
- IEC Ex INE 10.0010X
- INERIS 06ATEX0014X

EPL

(Equipment protection level)

Degree of Protection

IEC Ex Certificate

ATEX Certificate

*Only for ATEX

The gas conical threads Gk/ISO 10226 are valid only for ATEX certificate

Tab. 1

Suggested tightening torques for the component n° 5

Size	Torque [Nm]
12/16	20
20	30
25	50
32	70
40	95
50	115
63	130
75	145
90	160

IEC EN 60079-0		Directive 94/9/EC		
EPL	Group	Equipment Group	Equipment Category	Zones
Ma	I	I	M1	NA
Mb	I	I	M2	NA
Ga	II	II	1G	0
Gb	II	II	2G	1
Gc	II	II	3G	2
Da	III	II	1D	20
Db	III	II	2D	21
Dc	III	II	3D	22

TABLE of STANDARD SCREW-THREADS - IDENTIFYING ABBREVIATIONS • TABLE of STANDARD SCREW-THREADS - IDENTIFYING ABBREVIATIONS

ISO 262-M	M12x1,5	I12	M16x1,5	I16	M20x1,5	I20	M25x1,5	I25	M32x1,5	I32	M40x1,5	I40	M50x1,5	I50	M63x1,5	I63	M75x1,5	I75	M80x2	I80	M85x2	I85	M90x2	I90
ISO 228-G	G1/4	B12	G3/8	B16	G1/2	B20	G3/4	B25	G1"	B32	G1 1/4	B40	G1 1/2	B50	G2"	B63	G2 1/2	B75	-	-	-	-	G3"	B90
DIN 40340-Pg	Pg7	P12	Pg9	P16	Pg11	P20	Pg13,5	P25	Pg16	P32	Pg21	P40	Pg29	P50	Pg36	P63	Pg42	P75	-	-	-	-	Pg48	P90
ANSI B1.20.1-NPT	1/4 NPT	N12	3/8 NPT	N16	1/2 NPT	N20	3/4 NPT	N25	1" NPT	N32	1 1/4 NPT	N40	1 1/2 NPT	N50	2" NPT	N63	2 1/2 NPT	N75	-	-	-	-	3" NPT	N90
*Gk	-	-	-	-	Gk1/2	U20	Gk3/4	U25	Gk1"	U32	Gk1 1/4	U40	Gk1 1/2	U50	Gk2"	U63	Gk2 1/2	U75	-	-	-	-	Gk3"	U90
*ISO 10226	R1/4	R12	R3/8	R16	R1/2	R20	R3/4	R25	R1"	R32	R1 1/4	R40	R1 1/2	R50	R2"	R63	R2 1/2	R75	-	-	-	-	R3"	R90

MAINTENANCE Maintenance works must be entrusted to staff-members properly qualified and instructed on the specific characteristics of the equipment, in accordance to IEC EN60079-17 standards.

I, the undersigned, hereby declare that the equipment referred to herein conforms to 2014/34/EU directive.

Giulio Tinti Giulio Tinti - Technical Manager (ATEX Authorized Person)