

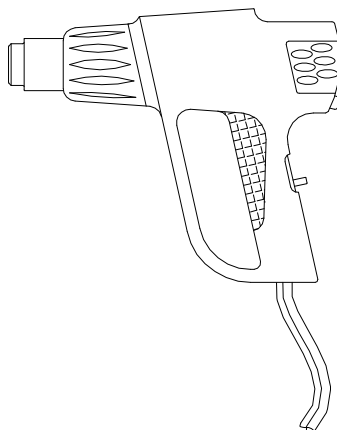
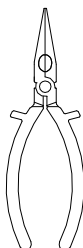
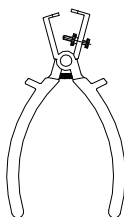
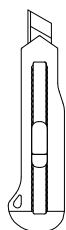
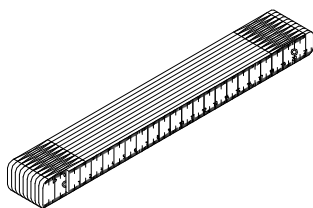
Sample Gas Conditioning You Can Trust

JH3BE

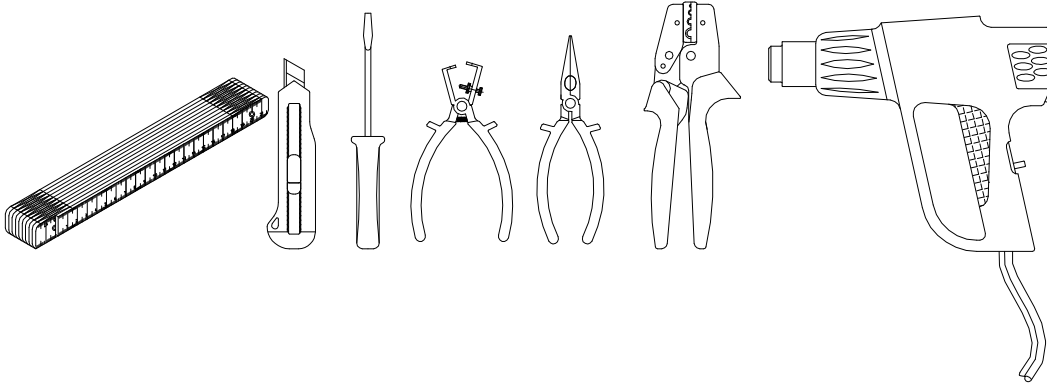
**Self-termination instructions (BU-069)
for heated hose type “cut-to-length” (with silicone end cap)**



JCT
Analysentechnik



recommended tools:



		Parts list for heated hose temperature range up to +80°C	Parts list for heated hose temperature range over +80°C
a	1 ea	Silicone end cap with bend protection	Silicone end cap with bend protection
b	1 ea	Silicone end cap without bend protection	Silicone end cap without bend protection
c	1,2 m	Silicone power cable 3 x 1,5 m²; red	Silicone power cable 3 x 1,5 m²; red
d	3 ea	Boot laces; 1,5 mm²; black	Boot laces; 1,5 mm²; black
e	1 ea	Aluminum label; 0,3 mm; blank	Aluminum label; 0,3 mm; blank
		Termination set for ELSR heating cable Part: 0911121	Termination set for ELSR-H heating cable Part: 0911119
f	2 ea	Shrink sleeve black; Di=3,2 mm; 32 mm.	Shrink sleeve natural; Di=3,2 mm; 20 mm
g	2 ea	Shrink sleeve black; Di=6,4 mm; 40 mm	Shrink sleeve natural; Di=4 mm; 32 mm
h	1 ea	Shrink sleeve black; Di=9,5 mm; 40 mm	Shrink sleeve natural; Di=8,9/4,8 mm; 40 mm
i	1 ea	Shrink sleeve black; Di=9,5 mm; 25 mm	Shrink sleeve natural; Di=8,9/4,8 mm; 25 mm
j	1 ea	Shrink sleeve black; Di=12,7 mm; 65 mm	Shrink sleeve natural; Di=11,4/7,9 mm; 65 mm
k	1 ea	Shrink sleeve black; Di=12,7 mm; 120mm	Shrink sleeve natural; Di=11,4/7,9 mm; 120mm
l	2 ea	Nickel crimp; 3,2 x 0,4 x 9,0 mm	Nickel crimp; 3,2 x 0,4 x 9,0 mm
m	1 ea	Nickel crimp; 4,0 x 0,4 x 9,0 mm	Nickel crimp; 4,0 x 0,4 x 9,0 mm
n		Termination instructions ELSR	Termination instructions ELSR-H

Additional material (enough for approx. 5 heated hoses)

Silicone glue	OMNIVISC 1002	90 gr. Tube Part: 2973000090
ELB-02 20m Glass cloth adhesive tape	0,19 mm; Tmax=140°C;	1 Roll Part: 2486800125

1. Cut the hose according to the desired length + min.150 mm on both ends for the electrical termination.



2. Incise the outer sheath of the heated hose according to the requested length of the protruding hose.



3. Remove the outer sheath of the hose as required for the connection length.
By outer sheath with braiding, secure the cut area against tearing with self-adhesive tape.



4. Remove and shorten the foil and insulation to the outer sheath length.



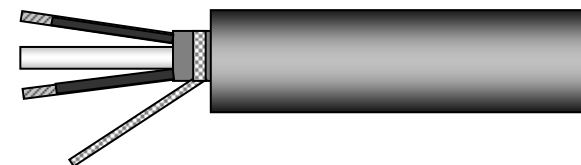
Termination of the heating tape

5. Unsheathe approx. 40mm of the outer insulation of the heating tape. Carefully open and twist the braiding. Remove 30 mm of electric insulation.

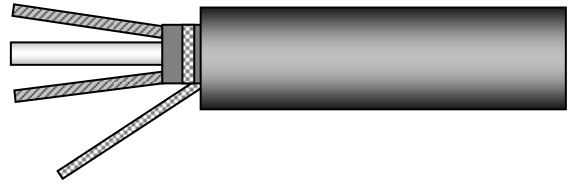
6. Expose bus wires and cut off the heating element between the bus wires (or heating element and spacer respectively)



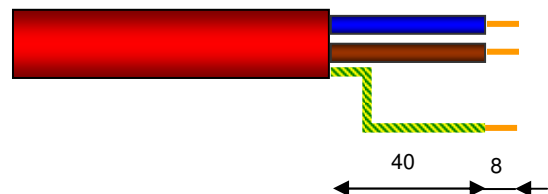
7. Push the thin shrinks sleeves (f) over the bus wires and shrink.



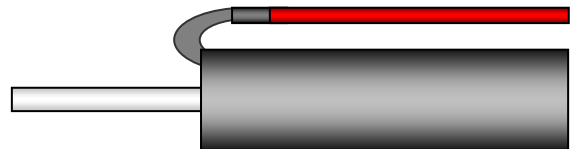
8. Push the medium size shrink sleeve (i) over and shrink. While still warm, squeeze the shrink sleeve between the bus wires with pointed pliers.



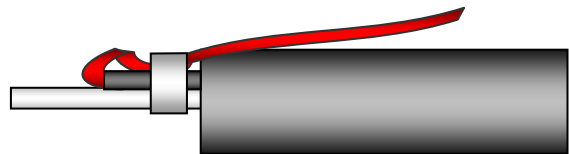
9. Remove jacket of silicone power cable (c) as shown.



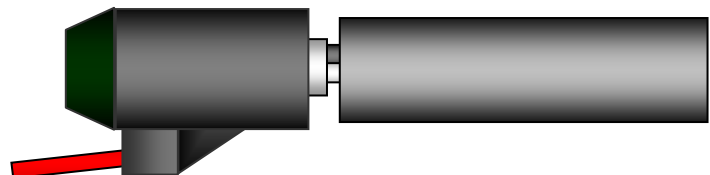
10. Push the shrink sleeve (k) over the connection cable. Push the shrink sleeves (g) over the blue and brown wire of the cold cable. Connect the blue and brown wire to the bus wires of the heating tape with crimps (l). Push the shrink sleeves (g) over the connections and shrink. Connect braid and earth-wire with a crimp(m). Shrink the complete connection with the shrink sleeve (k). Make sure the ends of the shrink sleeve (k) rest on the outer sheaths of heating tape and supply lead.



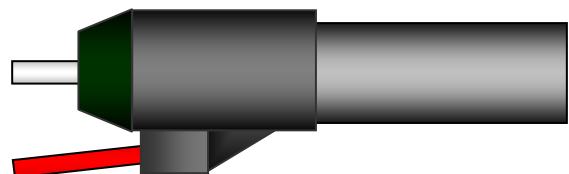
11. For the termination of the heating tape with power supply (c) cable or of the protruding heating tape, please follow the instructions of the heating tape manufacturer. Attach the cold cable or the heating tape at the inner hose with adhesive tape. Insulate the connection part



12. **Only for end caps with bend protection**
Push the power supply cable through the stamped holes of the silicone cap (a).

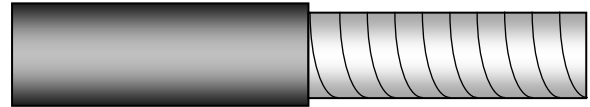


13. Place silicone glue to the end of the heated hose and the end cap (a). Slide the end cap (a) onto the hose and let the glue dry.

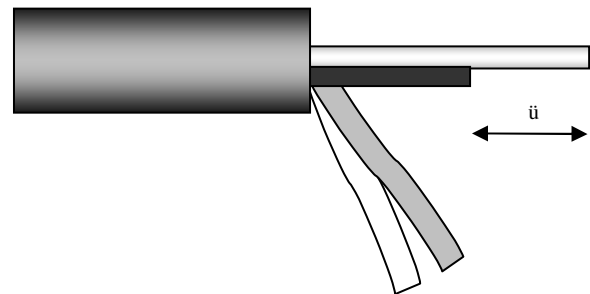


End Termination

14. Incise the heated hose at the end acc. to the required length of the protruding inner hose plus 150mm for the end termination of the heating tape. Push or fold the incised part backwards.

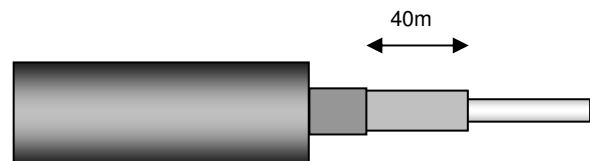


15. Expose the inner hose and the heating tape. Do not cut off insulation and aluminum foil. Shorten the heating tape (ü) by the required protrusion of the inner hose.

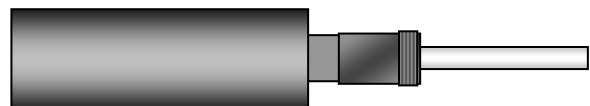


16. **The instructions of the splice box are to be used when the termination of the heated hoses are to be placed into a splice box.**

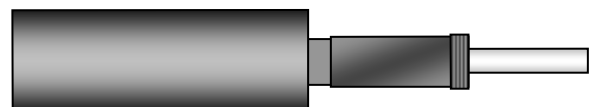
17. Remove approx. 40mm of the outer jacket of the heating tape. Open and cut off the braiding.



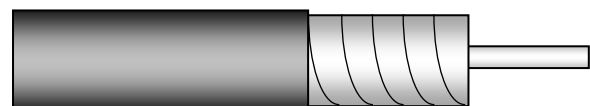
18. Shorten the heating tape by 20mm. Push the shrink sleeve (h) half way over and shrink. While still warm, press the end of shrink sleeve with pointed pliers.



19. Put the shrink sleeve (j) approx. 15mm over the outer jacket of the heating tape and shrink. While still warm, press the end of shrink sleeve with pointed pliers.



20. After the electric end termination, the heating tape is to be attached to the inner hose, covered with aluminum foil and insulation. Protruding parts of insulation or aluminum foil shall be cut off at the end of the heating tape.



21. Put the outer sheath around the complete insulation and tightly cover with adhesive tape so that the edges of the cut will touch. Shorten the sheath acc. to the required dimension.

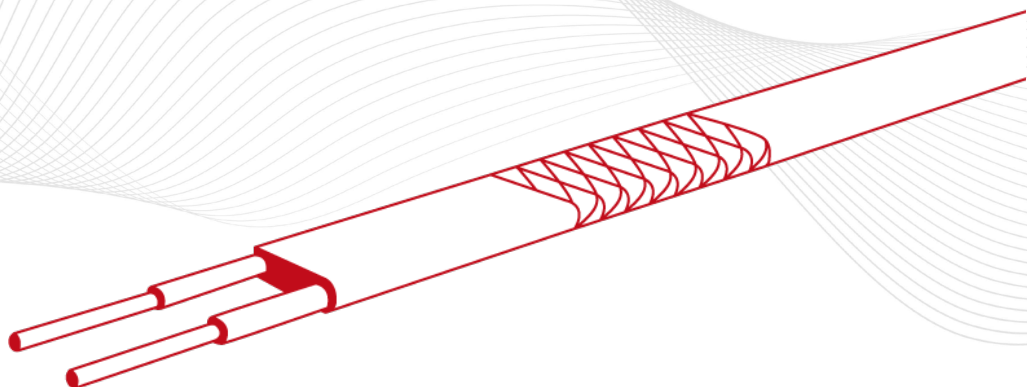


22. Carry silicone glue onto the heated hose end and end cap (b). Slide the end cap on and let the glue dry.



Warning:

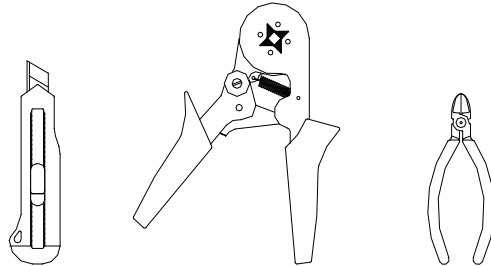
Insulation resistance must be measured before commissioning! Heated hoses with insufficient insulation (<20Mohm) are not to be operated!



QAA 101

Termination Instructions for Self-Regulating Heating Tapes Type ELSR with Gland

1. Recommended Tools



2. Contents of Kit

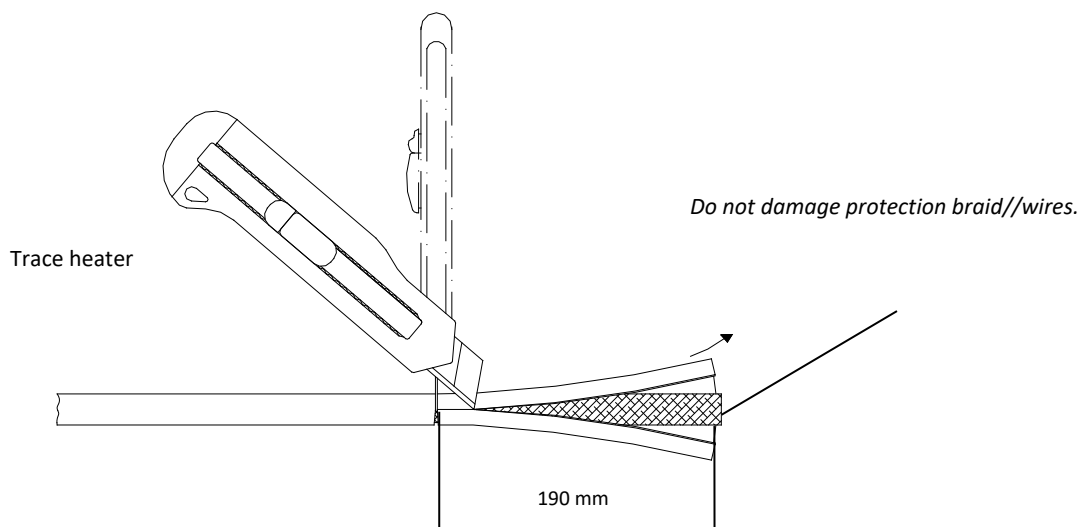
			<i>pieces</i>
a	Heat shrink sleeve $\varnothing i=3/16"$ (4,8 mm); 180 mm long; gn/yel		1
a'	Heat shrink sleeve $\varnothing i=1/16"$ (1,6 mm); 180 mm long; gn/yel		1
b	Insulator for connection ELSR		1
c	Wire pins 1,5 mm ² ; black		1
d	Pin –type cable socket 1.5-2.5 mm ² , E-Cu, galv.tin plated (optional)		1
e	Pin-type cable socket 4-6 mm ² , E-Cu, gav. galv.		1
f	Cable gland M25x1.5 or M20x1.5		1
g	is void		1
h	Silicone glue		1
i	Earth kit (optional, separate)		(1)

3. Instructions

Make sure to use the right tools for connections with respect to the size of the wires and end pins.

All Steps to be done by experienced personnel only !

After completion check insulation resistance (min. 500VDC, recommended 2500VDC
=> min. 20 MOhm) and heater resistance!



4. Steps

4 a. (Typ/type "BO")

widen braid, pull heating cable through

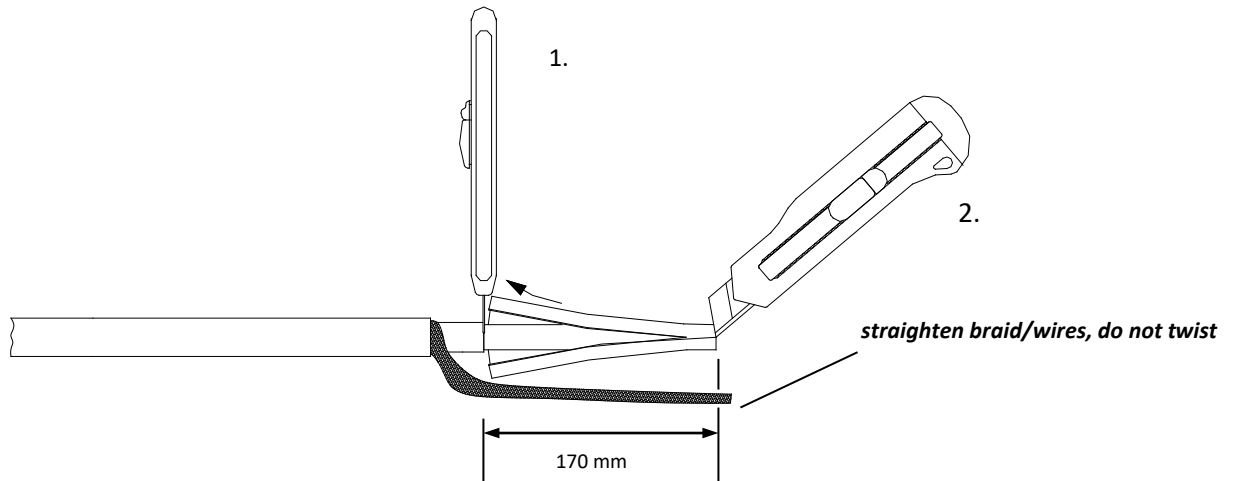


4 b. (Typ/type "AO")

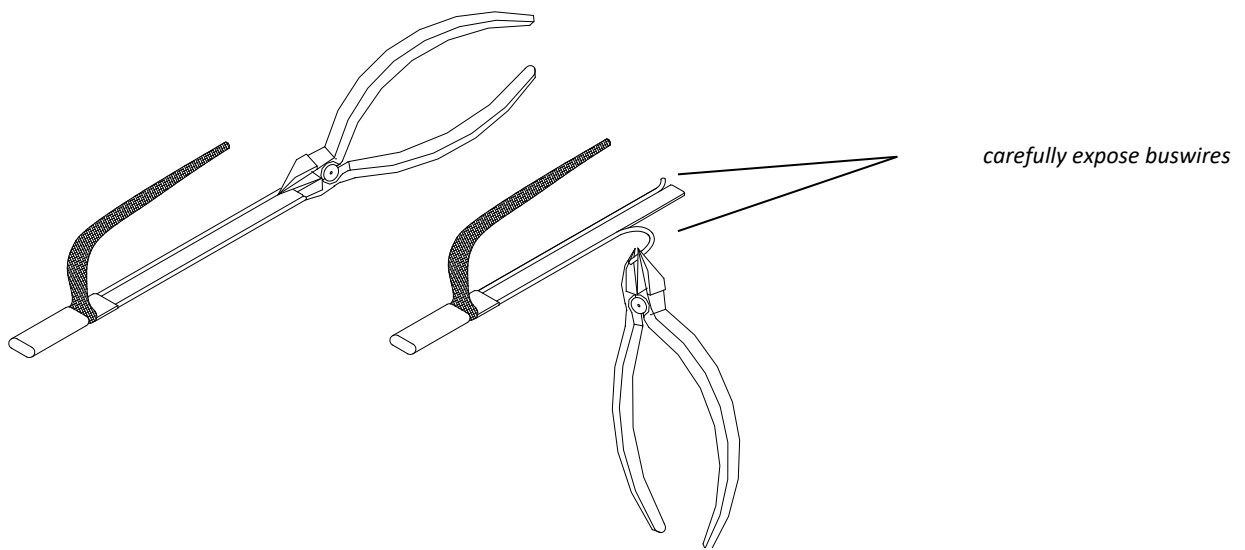
remove aluminium foil



5.

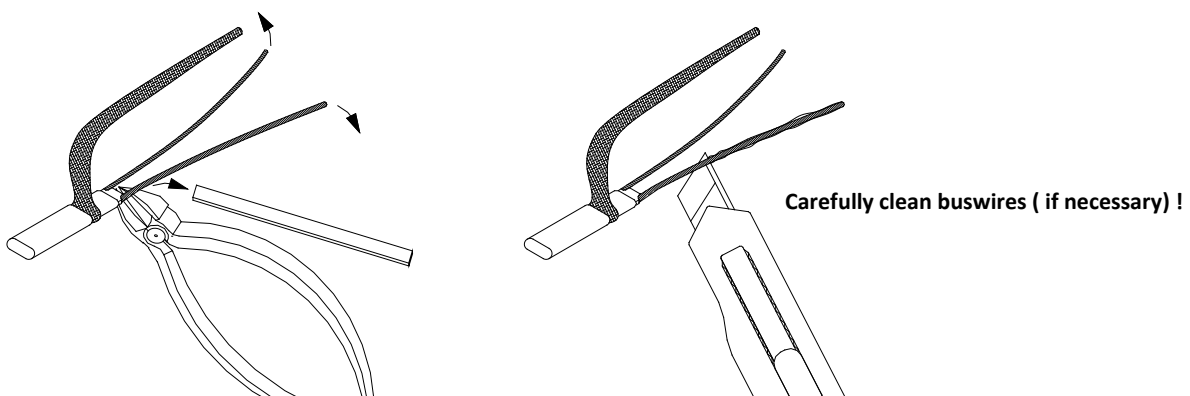


6.



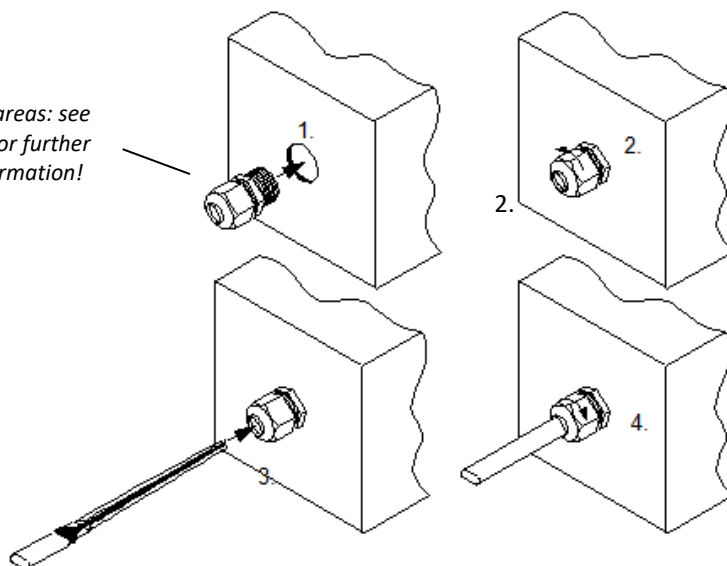
7.

7a.

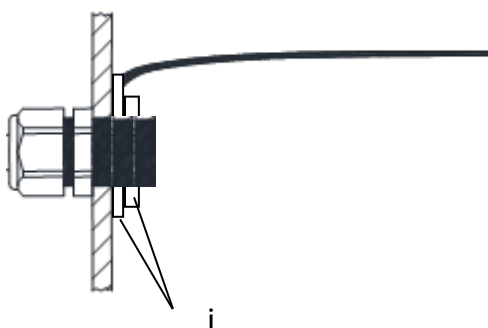


8.

For hazardous areas: see gland manual for further important information!

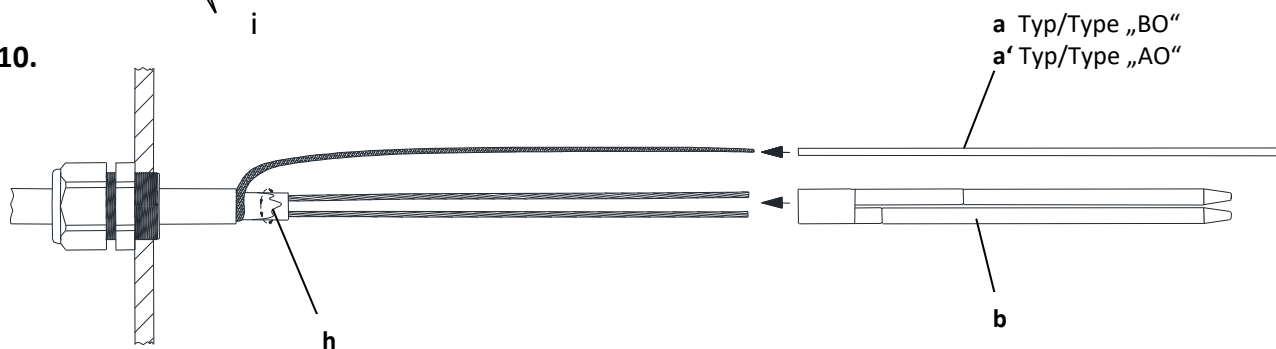


9.

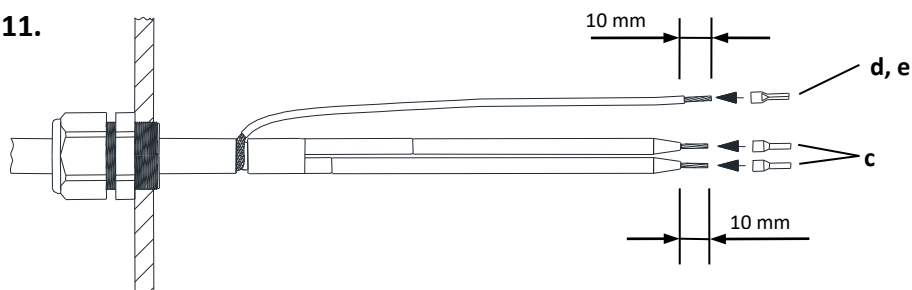


When metal glands are fitted to plastic enclosures: earthing of gland required

10.



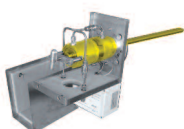
11.



Gasentnahmesonden

beheizte Messgasleitungen

Messgaskühler



Messgasaufbereitungen

NOx-Konverter

und Lösungen für

