ELITEX GMBH

**Shut Version
WGT 5/7/10/12/14/16/20
Water Gas Termination**

Technical Datasheet

INSTALLATION INSTRUCTION

Application

The WGT fits independent from pipe manufacturer as a sealing element for all listed sizes. The WGT seal off water and gas in micro ducts with various cable diameters and works also like a blind plug. Beside excellent sealing performance the WGT also has good strain relief for cable and micro duct. With the optional PowerClip the strain relief improve by clamping the strength members like aramid yarn. At the cable side the WGT has an integrated shape for bend protection. Please also refer to the technical data sheets for the products.

Scope of delivery

Every WGT housing comes with a sealing gasket according to the selected cable size. The sealing gasket has two functions. It works as a blind plug for empty micro ducts and as a seal for the cable.
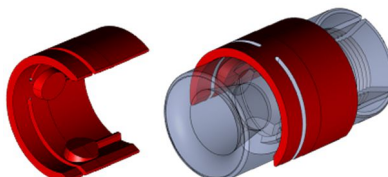

Sealing gaskets

Various sealing gaskets for different micro ducts and applicable cable diameters are available. Please refer to the table with available sizes on last page. Customer specific gaskets are available on request.
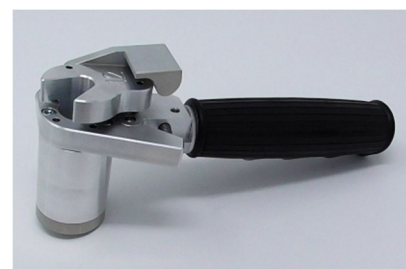

PowerClip®

If fixation of strain relief elements of the cable is required, the PowerClip® is the right choice.

Tools

For every size of WGT a disassembly clip is available. For most sizes also a professional installation tool is available. The tool simplifies assembly and disassembly of the WGT especially if the cable is already in place. The WGT can be installed without using the tool but for disassembly, at least for WGT size 5mm, 7mm and thin cables, the use of the PullClip is strongly recommended.

| PullClip	Order No.	Assembly Pliers	Order No.	PowerClip®	Order No.
WGT 5mm	01-044-01 A			-	-
WGT 7mm	01-045-01 A	**WGT 7mm**	01-038-01 A	**WGT 7mm-**	01-011-01-A
WGT 10mm	01-046-01 A	**WGT 10mm**	01-039-01 A	**WGT 10mm**	01-008-01 A
WGT 12mm	01-047-01 A	**WGT 12mm**	01-040-01 A	**WGT 12mm**	01-009-01 A
WGT 14mm	01-048-01 A	-	-	-	-
WGT 16mm	01-049-01 A	-	-	-	-

1. Important instructions

The manual is for the full version of WGT, separated into the parts assembly with and without tools.
- Before starting installation, check if the end of the micro duct is clean from any kind of dirt pollution and lubricants. Also check carefully inside of micro duct on such contamination, to avoid application problems later.
- The end of a micro duct need a straight, vertical, clean cut with a tool recommended by duct manufacture.
- Due to tolerances of the outside diameter of the micro duct, different force may appear for installing the WGT body onto the duct.

## 1.1 Mounting the WGT without tools on an empty micro duct

The WGT with sealing gasket can be used as sealing blind plug for empty micro ducts.
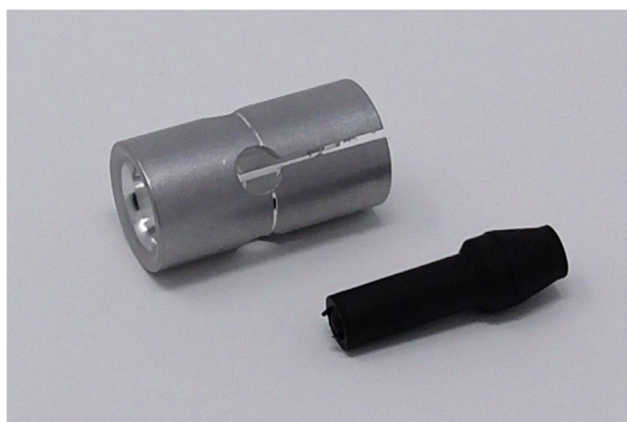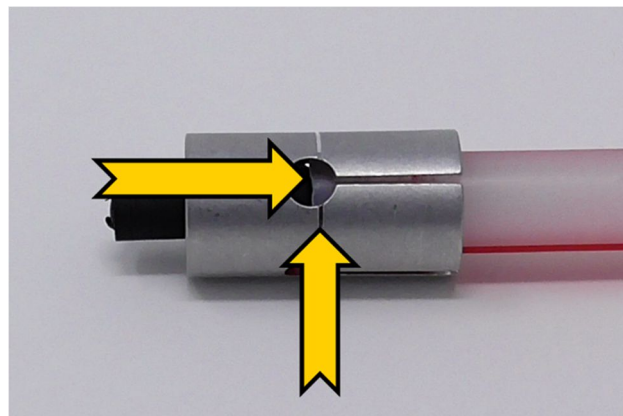

1.2   Select the appropriate size of WGT according to the diameter of micro duct and size of sealing gasket to fit the cable diameter which will be installed later
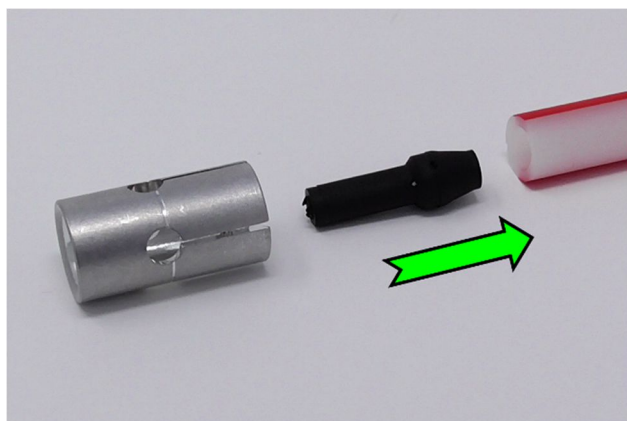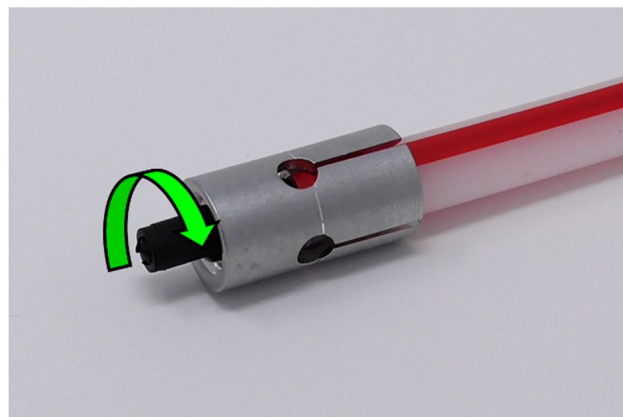

1.3   Insert sealing gasket with cone side into the micro duct, blind plug pointing towards the WGT.
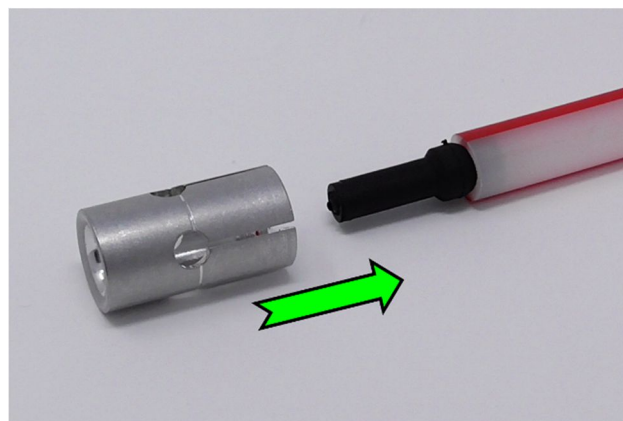
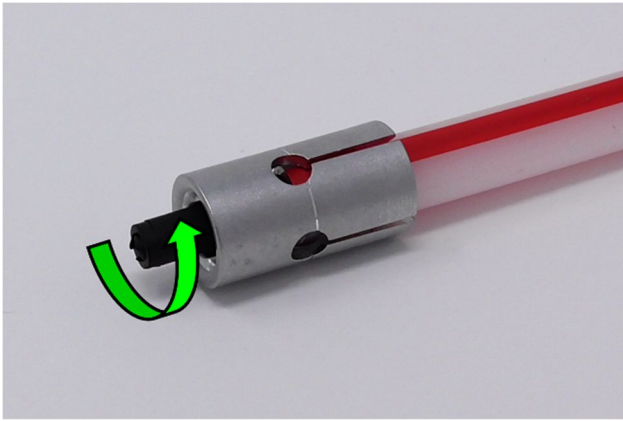1.4   Slide WGT over the blind plug and push it onto the micro duct

1.5   Push WGT on the micro duct until the edge of the duct is at least flush with the ring marking on WGT body (arrows). This ensures tightness of WGT.
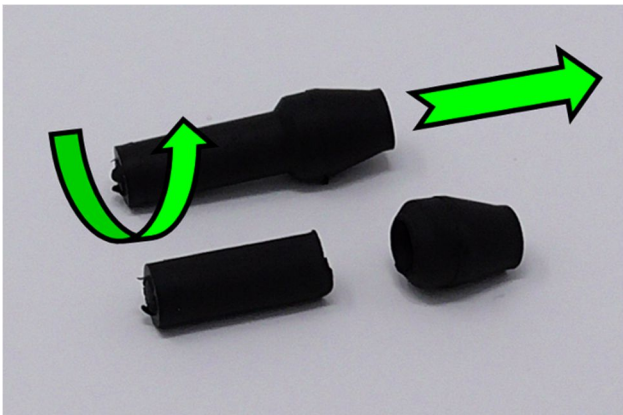

Note: To improve tightness and tensile strength on micro duct, rotate WGT ¼ turn clockwise.

2.   Disassembly of WGT without tools for an empty micro duct
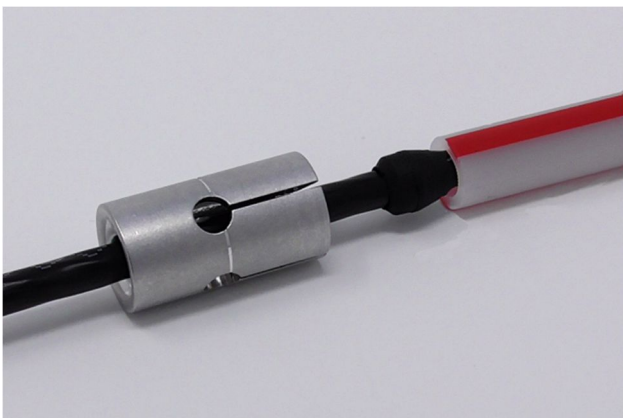

2.1   Release WGT by turning it counterclockwise. Remove seal and keep it for later use.

3.   Installation of WGT without tools for micro duct with cable


3.1   Before installation remove blind plug from sealing gasket. Hold blind plug with one hand and seal cone with other hand, turn against each other and rip off blind plug. The blind plug is no longer required.
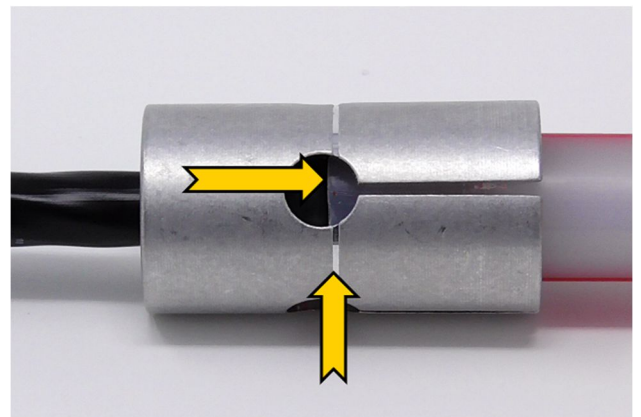

3.2   Slide sealing gasket with cone side towards micro duct onto the cable till it stops in the micro duct. Slide WGT body on cable afterwards.
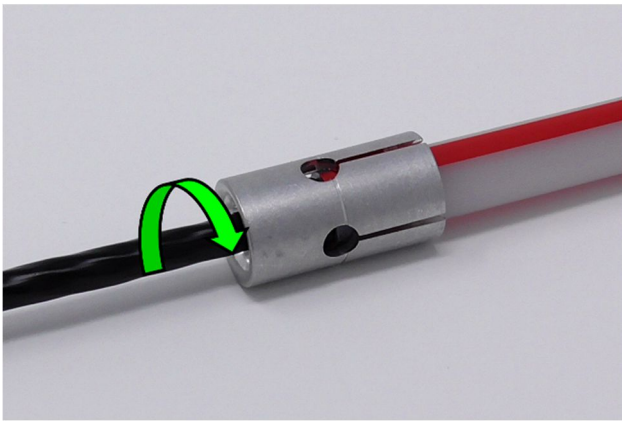

Note: To facilitate seal installation, cut sealing gasket in longitudinal direction. Place seal around cable and slide it till stop into the micro duct.
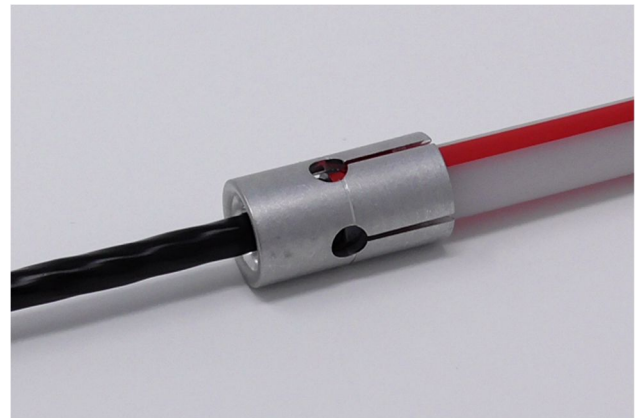
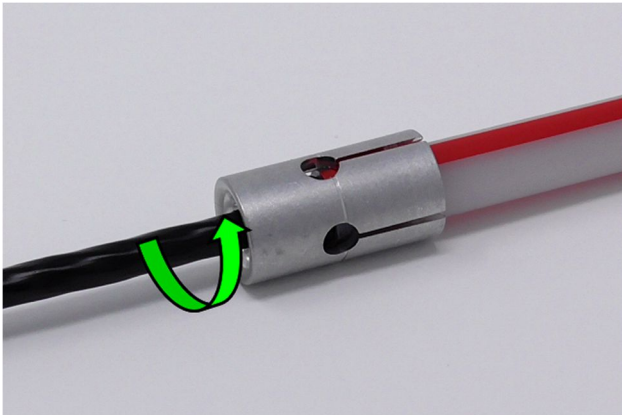3.3   Push WGT on the micro duct.

3.4   Push WGT on the micro duct until the edge of the duct is at least flush with the ring marking on WGT body (arrows). This ensures the tightness.

Note: To improve tightness and tensile strength on micro duct, rotate WGT ¼ turn clockwise.

3.5 Disassembly of WGT without tools for a micro duct with cable


3.6 Release WGT by turning counterclockwise but hold cable during procedure.
If sealing gasket is clean and in good condition it may be used again.
Note: If WGT 5/7mm and thin cables are used, usage of dismounting tool is strongly recommended.
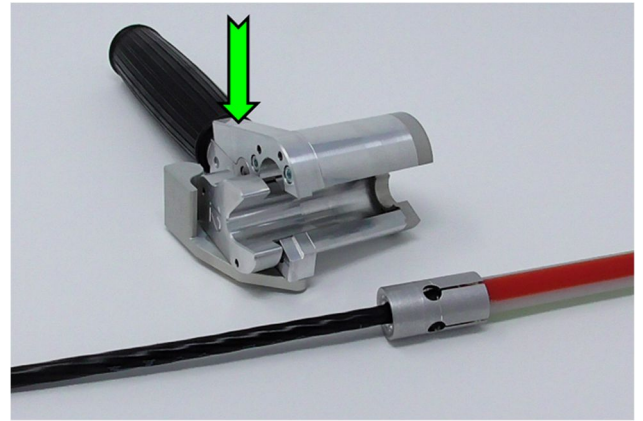
4. Installation of WGT with assembly pliers for micro duct with cable

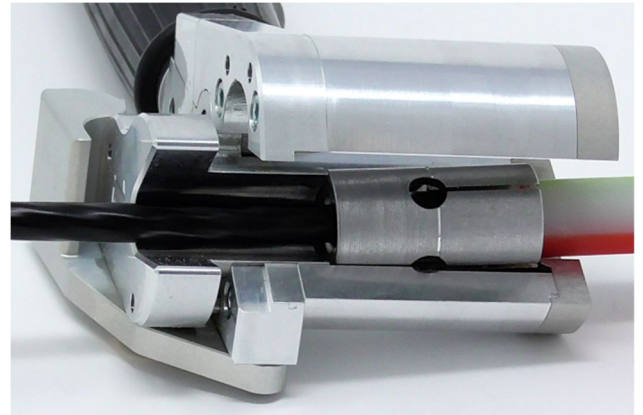Installation and mainly disassembly is much faster and gentle for the cable.
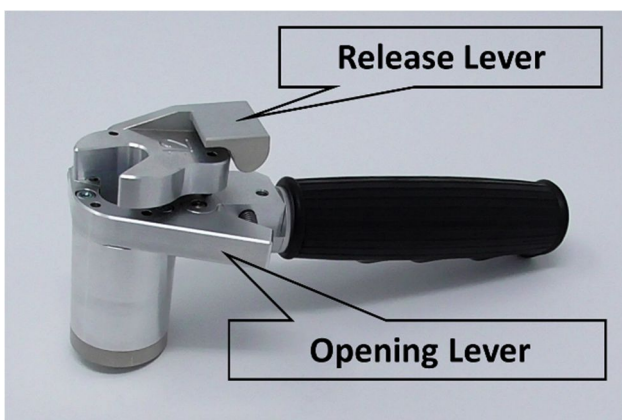
Note: Always press release lever during installation or disassembly.
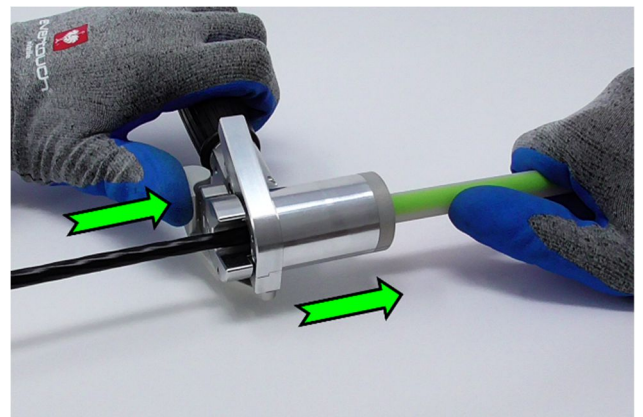
4.1 Install WGT and sealing gasket till chapter 3.2. **but don't push WGT body onto micro duct!**
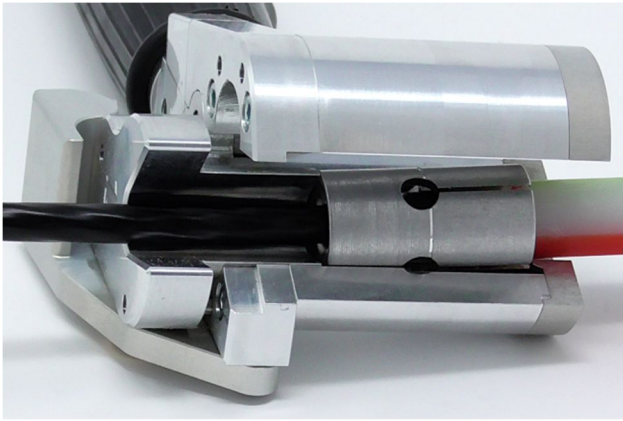

4.2 Open assembly pliers by pushing opening lever.

4.3 Put WGT into assembly pliers and close it. Cable has to point out top side of tool micro duct to bottom side. If it doesn't close perfect, WGT was inserted faulty.
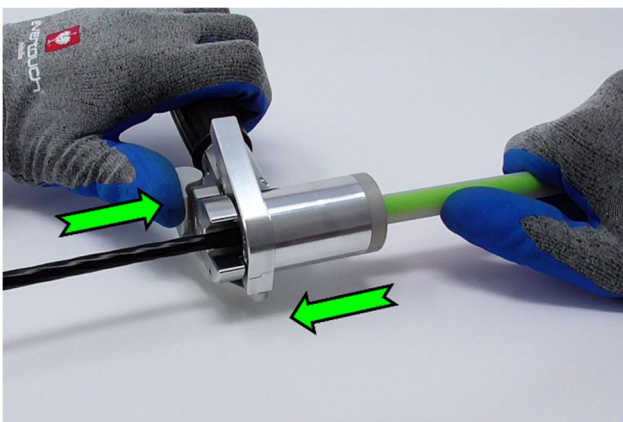

4.4 Press release lever and push WGT onto micro duct.
WGT must be in position like described in point 3.4

## 5. Disassembly of WGT with tools for a micro duct with cable

5.1   Put WGT into assembly pliers and close it. Cable has to point out top side of tool, micro duct has to point out to bottom side. If it doesn't close perfect, WGT was inserted faulty.
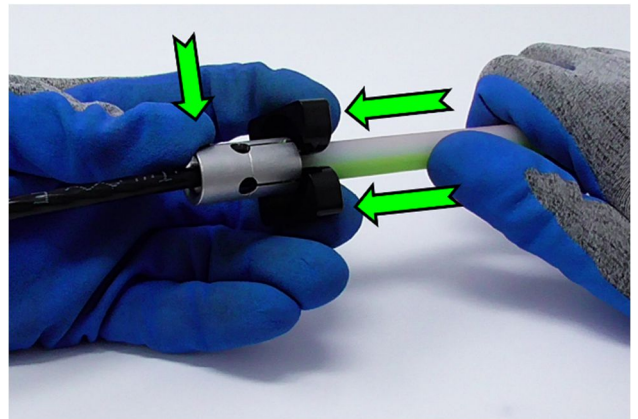

5.2   Press release lever and remove the WGT from the micro tube. Open the assembly tool and remove the WGT. If sealing gasket is clean and in good condition it may be used again.
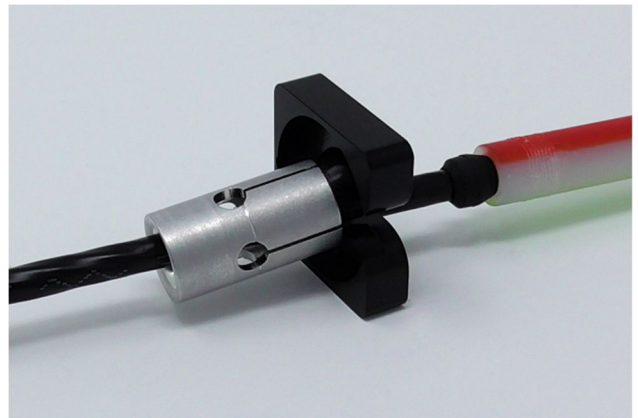
5.3   Disassembly of WGT with PullClip for a micro duct with cable
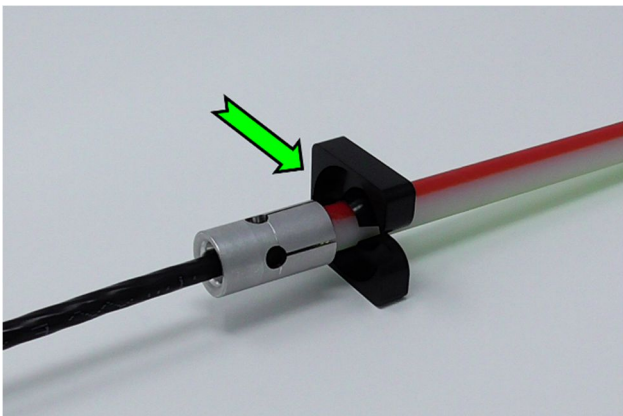
5.4   Slide PullClip on the micro duct behind WGT. The cone-shaped notch must point towards WGT.

5.5   Place one finger left and another finger on right side under the PullClip, fix top side of WGT with your thumb and pull off WGT from micro tube.
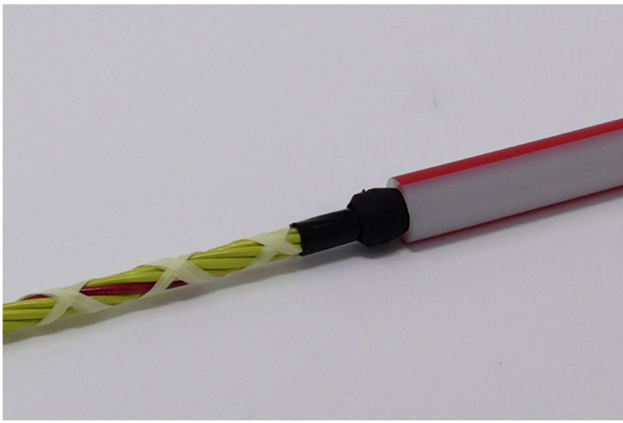

Note: If sealing gasket is clean and in good condition it may be used again.
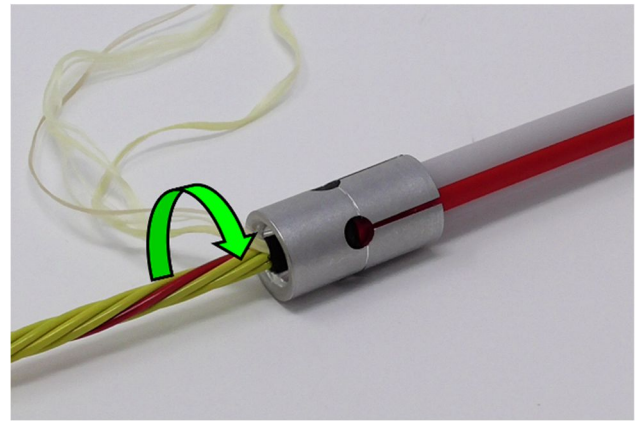
7.   . Installation of WGT with PowerClip to clamp strain relief (aramid) of cable

If fixation of strain relief elements of the cable is required, PowerClip has to be installed.
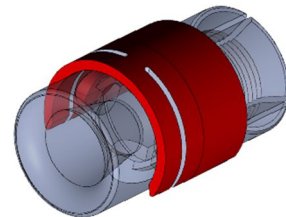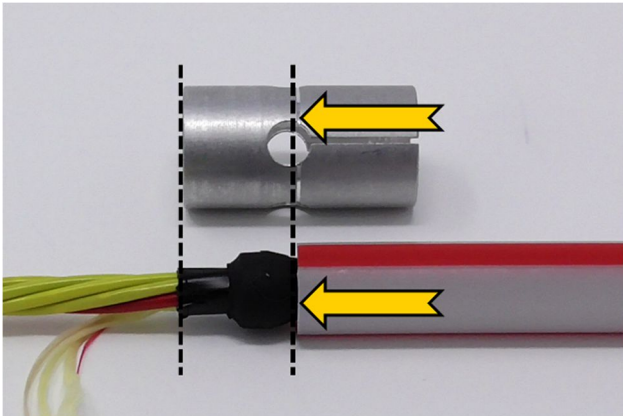
7.1   Install sealing gasket like in capture 3 to 3.3. To facilitate mounting of WGT, untie strength members (aramid yarn) after installation of WGT.
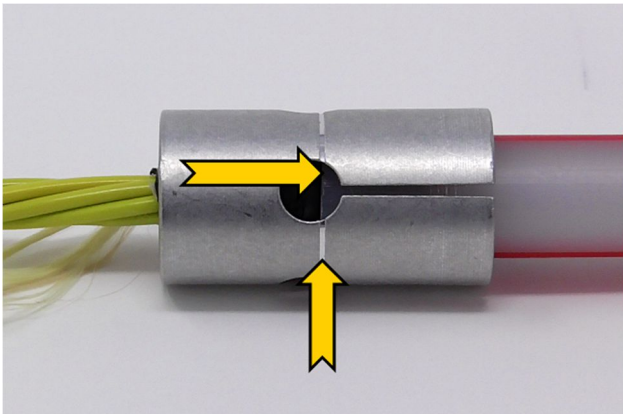

Note: To improve tightness and tensile strength on micro duct, rotate WGT ¼ turn clockwise.
Pull aramid yarn tight and slightly twist or twirl it.

7.2   Strip cable jacket according to specification of cable manufacturer. After installing of WGT, edge of cable jacket must be flush with edge of WGT body. Lines in picture shows length of cable jacket to be cut. Leave at least 25 cm of aramid yarn for PowerClip installation.
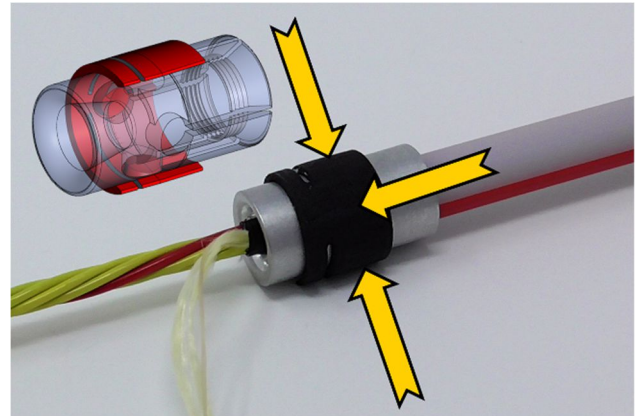
7.4   Mount PowerClip onto the WGT in a way all 3 tabs inside of the clip fit into the holes of the WGT body.

7.3   Install WGT with or without tool like described in the previous chapters.
Push WGT on the micro duct until the edge of the duct is at least flush with the ring marking on WGT body (arrows). This ensures the tightness.
Note: To improve tightness and tensile strength on micro duct, rotate WGT ¼ turn clockwise.
Pull aramid yarn tight and slightly twist or twirl it.
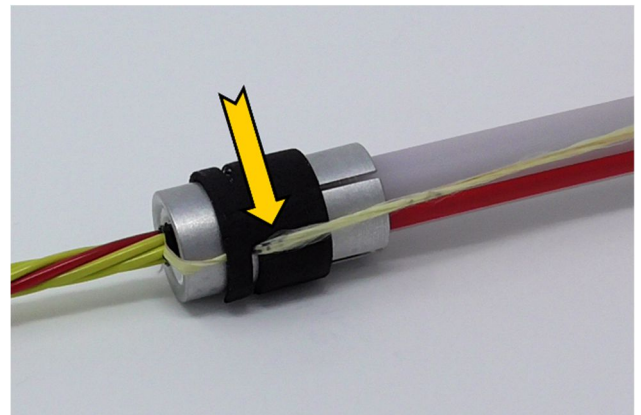
7.5   Wrap aramid yarn in a figure 8 shape under the flaps of the PowerClip. Pull aramid yarn tight, twist and pull into direction towards micro duct and beneath flap of PowerClip.
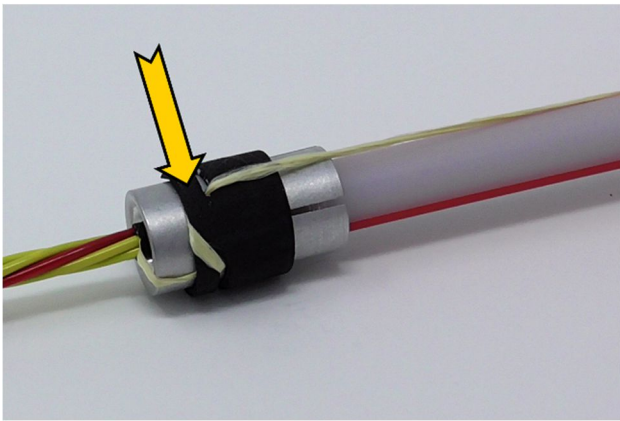
7.6 Pull aramid yarn diagonally, up to the side of the cable. Then slide it beneath flap of PowerClip back into direction of the micro tube.

7.7 Again pull aramid yarn diagonally, upwards beneath PowerClip like described before.
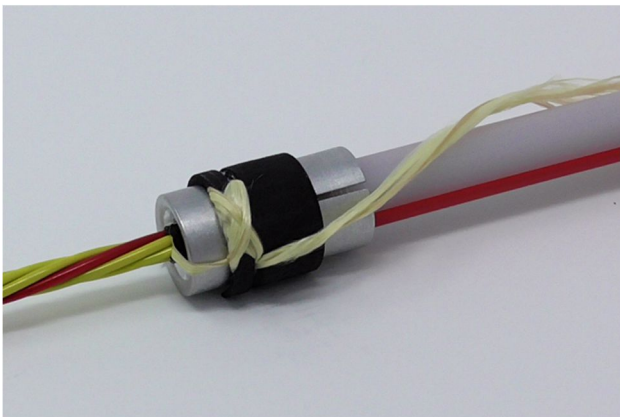
7.8 Repeat this figure 8 shape wrap up to 6 times. If possible, remain enough length of aramid yarn to enable a retry of installation.

8. Installation LabelClip

The LabelClip is available for micro ducts with outer diameters of 7/10/12/14/16/20mm (https://www.elitex-gmbh.de/werkzeuge-zubehör-en/beschriftungsclip-en/)

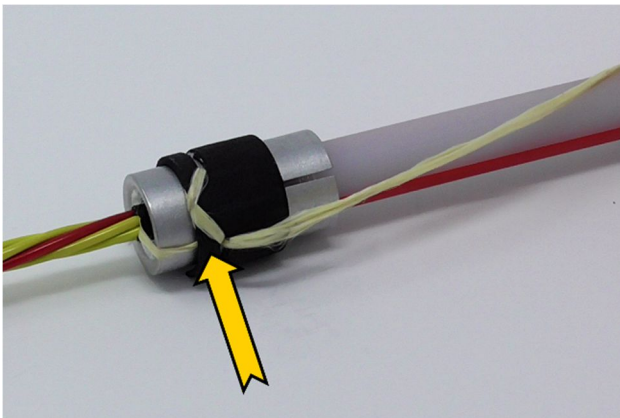| Item	Order No
LabelClip for WGT 7mm	01-061-01 A
LabelClip for WGT 10mm	01-062-01 A
LabelClip for WGT 12mm	01-063-01 A
LabelClip for WGT 14mm	01-064-01 A
LabelClip for WGT 16mm	01-065-01 A
LabelClip for WGT 20mm	01-066-01 A

8.1 Position the LabelClip right below WGT and clip it onto micro duct. The LabelClip is rewriteable multiple times with permanent marker. Labels from common label printers stick well to the LabelClip and still can be removed.

Table sealing gaskets

sealing gasket	min	cable	max	gasket no.	min	cable	max	gasket no.	min	cable	max	gasket no.	min	cable	max	gasket no.	min	cable	max	gasket no.	min	cable	max	gasket no.	min	cable	max	gasket no.	min	cable	max	gasket no.
micro duct dia.																																	
5mm																																	
5x1= inner 3.0	0.9	-	1.5	1	1.4	-	2	2	1.9	-	2.5	3					-				-				-				-			
5x0.75= inner 3.5	0.9	-	1.5	1	1.4	-	2	2	1.9	-	2.5	3	2.4	-	3	4	-				-				-				-			
7mm																									~~4~~	-	~~4,6~~	~~11*~~				
7x1.50= inner 3.0	1	-	1.6	5	1.5	-	2.1	6	2	-	2.6	7	2.5	-	3.1	8	-				-				-				-			
7x0.75= inner 5.5	1	-	1.6	5	1.5	-	2.1	6	2	-	2.6	7	2.5	-	3.1	8	3	-	3,6	9	3,5	-	4,1	10	-							
10mm																																
10x2.0= inner 6.0	2	-	3	12	2.9	-	3.9	13	3.8	-	4.8	14	4.7	-	5.7	15	-				-				-				-			
10x1.0= inner 8.0	2	-	3	12	2.9	-	3.9	13	3.8	-	4.8	14	4.7	-	5.7	15	5,6	-	6,6	16	-				-				-			
12mm																									~~8,4~~	-	~~9,4~~	~~23*~~				
12x2.0= inner 8.0	2	-	3	12	2.9	-	3.9	13	3.8	-	4.8	14	4.7	-	5.7	15	5,6	-	6,6	16	-				-				-			
12x1.1= inner 9.8	2	-	3	17	2.9	-	3.9	18	3.8	-	4.8	19	4.7	-	5.7	20	5,6	-	6,6	21	6,5	-	7,5	22	-				-			
14mm																																
14x2.0= inner 10.0	6	-	7	24	6.9	-	7.9	25	7.8	-	8.8	26	-				-				-				-				-			
14x1.3= inner 11.4	6	-	7	24	6.9	-	7.9	25	7.8	-	8.8	26	8.7	-	9.7	27					-				-				-			
16mm																																
16x2.0= inner 12.0	6	-	7	24	8	-	9	28	8,9	-	9,9	29	9,8	-	11	30	-				-				-				-			
20mm																	~~12~~	-	~~13~~	~~35*~~					~~13~~	-	~~14~~	~~37*~~	~~14~~	-	~~15~~	~~38*~~
20x2.5= inner 15.0	8	-	9	31	8.9	-	9.9	32	9.8	-	11	33	11	-	12	34	4,5	-	5,5	39	7,5	-	8,5	40	-				-			
20x2.0= inner 16.0	8	-	9	31	8.9	-	9.9	32	9.8	-	11	33	11	-	12	34	4,5	-	5,5	39	7,5	-	8,5	40	-				-			

*Number for sealing gasket will be reassigned