# TEX GMBH



# Shut Version WGT 5/7/10/12/14/16/20

**Water Gas Termination** 

Technical Datasheet Installation Instructions

#### **Application and features**

The WGT is a sealing element for micro ducts according to DIN EN 50411-2-8. It fits for all listed sizes independent from pipe manufacturers. The WGT seals off water and gas in micro ducts with various cable diameters and works also like a blind plug for empty ducts. Beside excellent sealing performance the WGT also has a good strain and push relief for cable and micro duct. With the optional PowerClip® the strain relief improve by clamping the strength members of the cable like aramid yarn. At the cable side, the WGT has an integrated shape for bend protection. The sealing gasket has a safety breaking point, which release gasket under extreme pressure and thus prevents release of the WGT from micro duct. The WGT is made from a corrosion-resistant aluminum alloy with anodized surface coating<sup>1)</sup>. Therefore, according to DIN EN 13501-1 (combustibility of building products) the WGT can be classified as A2 (non-/limited combustible), in combination with sealing gasket s1 (no-/little smoke) d0 (no droplets). The WGT, PowerClip and sealing gasket are halogen free according to DIN EN 60684-2. Temperature range applies from -40°C to +70°C



#### PowerClip®

With the optional PowerClip® the strain and push relief improve by clamping the strength members of the cable like aramid yarn (see table). The maximum attainable tensile forces depend on the quantity and quality of the strain relief elements from the cable. Order number see table Tools/Accessories





#### 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.





### Scope of delivery

Every WGT housing comes with a sealing gasket according to the selected cable size (see table sealing gasket). Select sealing gasket according to your WGT size and cable diameter and specify number with order. The sealing gasket has two functions, it works as a blind plug for empty micro ducts and as a seal for the cable.

Table tools/accessories PowerClip®

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	-	-	-	-

# Sealing gaskets

Sealing gaskets are available for common micro ducts and applicable cable diameters. The blind plug of sealing gasket can be separated from cable sealing at safety braking point. Sealing gaskets are made from thermoplastic rubber (TPV) Santoprene™. Select sealing gasket according to your WGT size and cable diameter from table below and specify number with order. Customer specific gaskets are available on request.



#### LabelClip

The LabelClip is an accessory to identify micro ducts. Due to the clip fixation at the micro duct, the LabelClip is easy to mount and held firmly in position. The LabelClip is rewriteable multiple times with permanent marker. Labels from common label printers stick well to the LabelClip and still can be removed. The LabelClip is available for micro ducts with outer diameters of 7/10/12/14/16/20mm.

For further information see

https://www.elitex-gmbh.de/werkzeuge-zubehör-en/beschriftungsclip-en



Marking

#### **Technical Data**

Feature shut version	WGT 5	WGT 7 <sup>5)</sup>	WGT 10*5)	WGT 12*5)	WGT 14 <sup>5)</sup>	WGT 16 <sup>5)</sup>	WGT 20	
Order No.	01-028-02B	01-025-02B	01-026-02B	01-027-02B	01-035-02B	01-029-02B	01-055-02B	
Ø outside micro duct	5	7	10	12	14	16	20	
tolerance <sup>2)</sup> [mm]	±0,1	±0.1	±0.2	±0.2	±0.2	±0.2	±0.2	
Ø cable [mm] for Ø micro	0.9-2.5	1.0-3.1	2.0-5.7	2.0-6.6	6.0-8.8	8.0-11.0	8.0-14.0	
duct/wall thickness [mm]	5/1.0	7/1.5	10/2.0	12/2.0	14/2.0	16/2.0	20/2.5	
Ø cable [mm] for Ø micro	0.9-3.0	1.0-4.6	2.0-6.6	2.0-9.4	6.0-9.7		8.0-15.0	
duct/wall thickness [mm]	5/0.75	7/0.75	10/1.0	12/1.1	14/1.3	-	20/2.0	
Ø outside WGT [mm]	8	10	14	17	19	22	26	
length WGT [mm]	15.5	19	26	32	38	42	52	
tensile strength WGT against micro	≥8	≥15	≥50	≥51	≥65	≥75	≥93	
cable [N] Ø cabel [mm]	2	3	4.6	6.8	8.7	10.4	12.8	
tensile strength PowerClip® WGT	-	≥75N	≥250N	≥290N	-	_	-	
against micro cable [N]		27511						
tensile strength WGT against micro	≥30	≥70	≥100	≥120	≥140	≥160	≥180	
duct, add. ¼ turn <sup>3)</sup> [N]	30-60	70-200	100-200	120-250				
tightness as blind plug,	≥2.5	≥5	≥5	≥5	≥5	≥5	≥5	
add. ¼ turn³) [bar]	4-7	5-13	5-13	5-13	5-9	5-8	5-8	
tightness with cable <sup>4)</sup> ,	≥0.5	≥1	≥1	≥1	≥1	≥1	≥1	
add. ¼ turn³) [bar]	1-5	1-10	1-10	1-10	1-6	1-5	1-5	
Reaction to fire DIN EN 13501-1	A2 s1 d0	A2 s1 d0	A2 s1 d0	A2 s1 d0	A2 s1 d0	A2 s1 d0	A2 s1 d0	
Halogen free DIN EN 60684-2	yes	yes	yes	yes	yes	yes	yes	

Listed values apply for properly installed product according to installation instructions.

**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.	_ ≥	Ö	⊏	60	П	Ü		90	⊏	Ü		50		Ü	ב	600	п	Ö		60	П	Ü	⊏	60	П	ن	≥	90	⊏	ے ن	60
5mm		$\forall$				Н								Н				Н				Н									
5x1= inner 3.0	0.9	-	1.5	1	1.4	_	2	2	1.9	-	2.5	3						-				-				_				-	
5x0.75= inner 3.5			1.5	1	1.4		_	2	1.9		_	3	2.4	_	3	4		-				_				-				-	
7mm																									4		4,6	11*			
7x1.50= inner 3.0	1	-	1.6	5	1.5	- 2	2.1	6	2	- :	2.6	7	2.5	- 3	3.1	8		-				-				-				-	
7x0.75= inner 5.5	1	-	1.6	5	1.5	- 2	2.1	6	2	- :	2.6	7	2.5	- 3	3.1	8	3	-	3,6	9	3,5	-	4,1	10		-					
10mm							_				_				_				-				-								
10x2.0= inner 6.0	2	-	3	12	2.9	- 3	3.9	13	3.8	- 4	4.8	14	4.7	- !	5.7	15		-				-				-				-	
10x1.0= inner 8.0	2	-	3	12	2.9	- 3	3.9	13	3.8	- 4	4.8	14	4.7	- !	5.7	15	5,6	-	6,6	16		-				-				-	
12mm																									8,4	- !	9,4	<u>23*</u>			
12x2.0= inner 8.0	2	-	3	12	2.9	- 3	3.9	13	3.8	- 4	4.8	14	4.7	- !	5.7	15	5,6	-	6,6	16		-				-				-	
12x1.1= inner 9.8	2	-	3	17	2.9	- 3	3.9	18	3.8	- 4	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	7.9	25	7.8	- 8	8.8	26		-				-				-				-				-	
14x1.3= inner 11.4	6	-	7	24	6.9	- 7	7.9	25	7.8	- 3	8.8	26	8.7	- 9	9.7	27						-				-				-	
16mm																															
16x2.0= inner 12.0	8	-	9	28	8.9	- 9	9.9	29	9.8	-	11	30		-				-				-				-				-	
20mm																	<del>12</del>	_	<del>13</del>	<u>35*</u>					<del>13</del>	-	<del>14</del>	<del>37*</del>	<del>1</del> 4	- 45	38*
20x2.5= inner 15.0	8	-	9	31	8.9	- 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	9.9	32	9.8	-	11	33	11	-	12	34	4,5	-	5,5	39	7,5	-	8,5	40		-				-	
*Number for soali		-1		11 1																											

<sup>\*</sup>Number for sealing gasket will be reassigned

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<sup>&</sup>lt;sup>1)</sup> The aluminum alloy with anodized surface coating is corrosion-resistant. The surface coating may change optically over time especially under conditions with high humidity and aggressive media (i.e. de-icing salt). Color change or precipitation can be removed and have no influence on the material properties, tightness or reusability.

<sup>&</sup>lt;sup>2)</sup> Tolerances shall apply for micro ducts according to DIN EN 50411-6-1 und DIN EN 60794-5-ff

<sup>3)</sup> Details see installation instruction

<sup>&</sup>lt;sup>4)</sup> tightness of 0,5 bar shall apply after 5 times repeated installation of WGT with same sealing gasket, at 20°C and 5°C, tested and approved according to specification of Deutsche Telekom TS SpeedNet-Micro Duct-System (size WGT 7/10/12)

<sup>5)</sup> Approved by Vodafone according to specification VFKD TS 104