



[General Information](#)

[Technical Data](#)

[Selection Guide](#)

[Order Submittal Sheet](#)

[Installation Instruction](#)



PSI Link-Seal® Modular Seals

with KTW/W270 approval for potable water



Pipeline Accessories

Link-Seal® Modular Seals, rubber with KTW/W270 approval

General Information/Technical Data

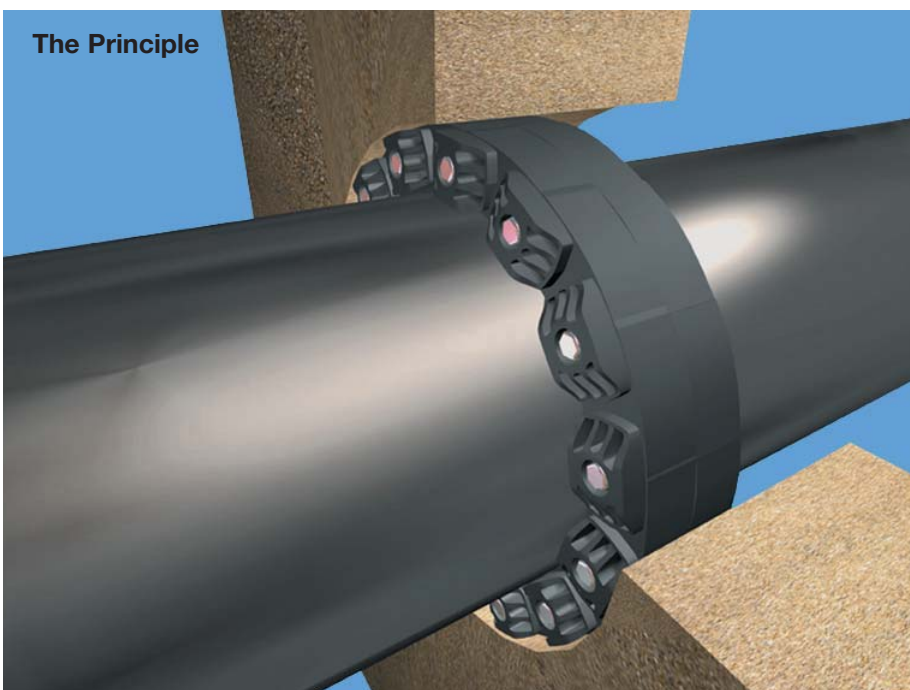


Potable water applications

Like the Link-Seal® standard versions, the KTW/W270 version is used to seal annular spaces pressure tight permanently. The KTW/W270 version is used in all places where the seals have direct contact with **potable water**, such as high-level tanks and potable water tanks, etc.

Temperature stability	KTW/W270 version	from -40°C up to +80°C
Pressure tight	up to 5 bar Link-Seal® type KTW/W270	

The values specified for the pressure tightness are valid at 23°C. For other, above all, higher permanent operating temperatures, an ejection safety device should, if required, be fitted.



Type	Version	Sealing element	Pressure plates	Nuts and bolts	Temperature range	Application
KTW/W270*	Shore 50 ± 5	EPDM black rubber with blue KTW stamp	Glass-fibre reinforced polyamide colour blue	Material A4-70 stainless steel	-40°C to + 80°C	Appropriate for potable water applications

* Elastomer tested in accordance with KTW and W 270

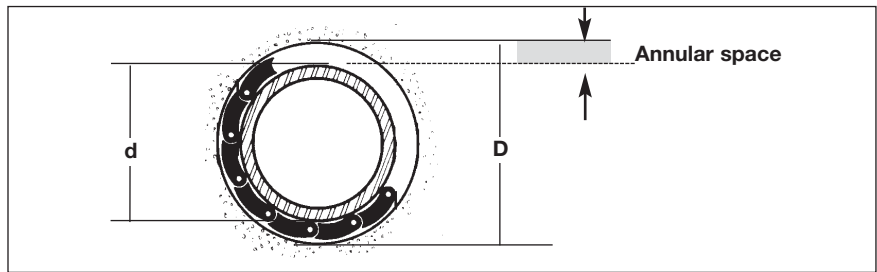
Link-Seal® Modular Seals, rubber with KTW/W270 approval

Selection/Order Submittal Sheet



1. Which type is suitable?

Calculate the annular space. The annular space is half the difference between your pipe size and the wall opening diameter. Use the following formula:



Wall opening I.D. (D)	-	Actual Pipe O.D. (d)	=		
<input style="width: 90%;" type="text"/>	-	<input style="width: 90%;" type="text"/>	=	<input style="width: 90%;" type="text"/>	Annular space
2					

From the adjacent chart, select the size closest to the annular space calculated in step 1. You have selected the correct size Link-Seal® modular seal if the free state thickness is less than the annular space and the expanded state thickness is greater than the annular space.

Type	Free state thickness	Annular space	Expanded state thickness	Necessary wall thickness
LS 200	12.7 mm		15.7 mm	70 mm
LS 275	16.0 mm		20.0 mm	70 mm
LS 300	17.5 mm		22.5 mm	100 mm
LS 315	20.5 mm		26.0 mm	100 mm
LS 325	24.0 mm		30.0 mm	120 mm
LS 340	24.5 mm		34.0 mm	120 mm
LS 360	31.5 mm		42.0 mm	120 mm
LS 400	35.5 mm		46.0 mm	140 mm
LS 410	36.5 mm		48.5 mm	140 mm
LS 425	28.6 mm		37.0 mm	140 mm
LS 440	44.0 mm		55.0 mm	140 mm
LS 475	41.3 mm		48.5 mm	140 mm
LS 500	61.0 mm		71.5 mm	150 mm
LS 525	53.0 mm		63.5 mm	150 mm
LS 575	48.0 mm		58.0 mm	150 mm
LS 625	83.0 mm		98.0 mm	150 mm
LS 650	69.0 mm		84.0 mm	150 mm

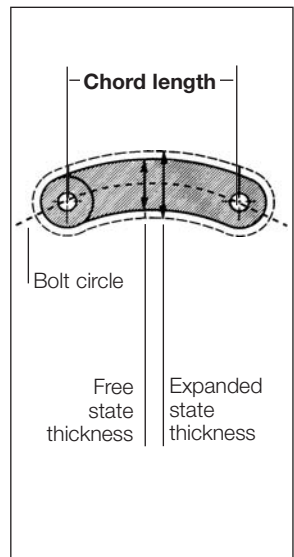
Type:

2. How many elements do you need?

Calculate the number of elements required to fit around the pipe and seal the annular space.

Determine the bolt circle for Link-Seal® modular seal assembly by using the formular below.

Type	Chord length	Carrier pipe O.D. min.	Carrier pipe O.D. max.	Min. no. of Segm.
LS 200	30.5 mm	from 21.3 mm	up to 323.9 mm ⁽¹⁾	4
LS 275	25.0 mm	from 0.0 mm	up to 90.0 mm	4
LS 300	40.5 mm	from 44.5 mm	up to 406.4 mm ⁽²⁾	5
LS 315	38.4 mm	from 37.0 mm	up to 315.0 mm	5
LS 325	79.0 mm	from 133.0 mm	up to 711.0 mm	6
LS 340	42.0 mm	from 30.0 mm	up to 323.9 mm	4
LS 360	55.5 mm	from 40.0 mm	up to 406.4 mm	5
LS 400	93.0 mm	from 139.7 mm	up to 1220.0 mm	6
LS 410	68.0 mm	from 60.3 mm	up to 323.9 mm	4
LS 425	93.0 mm	from 144.0 mm	up to 1220.0 mm	6
LS 440	99.0 mm	from 139.7 mm	up to 1220.0 mm	6
LS 475	68.0 mm	from 60.3 mm	up to 1220.0 mm	5
LS 500	99.0 mm	from 100.0 mm	up to 1220.0 mm	5
LS 525	99.0 mm	from 133.0 mm	up to 1220.0 mm	6
LS 575	79.0 mm	from 130.0 mm	up to 1220.0 mm	5
LS 625	106.7 mm	from 133.0 mm	up to 2000.0 mm	5
LS 650	106.7 mm	from 133.0 mm	up to 2000.0 mm	5



¹ As from O.D. 150 mm we recommend to enlarge your coredrill to install Link-Seal® type 300.

² As from O.D. 300 mm we recommend to enlarge your coredrill to install Link-Seal® type 325.

Wall Opening I.D. (D)	+	Pipe Diameter O.D. (d)		Bolt Circle	Chord length	Number
<input style="width: 90%;" type="text"/>	+	<input style="width: 90%;" type="text"/>	x 3.14 =	<input style="width: 90%;" type="text"/>	:	<input style="width: 90%;" type="text"/>
2						
			=			

Number:

Link-Seal® modular seal calculation online:
www.psi-products.de

Link-Seal® Modular Seals, rubber with KTW/W270 approval

Selection/Order Submittal Sheet



3. Correct article number?

Please select the correct article number corresponding to your choice.



Type	KTW / W270
LS 200	2-025-00510
LS 275	2-025-00511
LS 300	2-024-00512
LS 315	2-024-00513
LS 325	2-024-00514
LS 340	2-024-00515
LS 360	2-024-00516
LS 400	2-024-00517
LS 410	2-024-00518
LS 425	2-024-00519
LS 440	2-024-00520
LS 475	2-024-00521
LS 500	2-024-00522
LS 525	2-024-00523
LS 575	2-024-00524
LS 625	2-024-00525
LS 650	2-024-00526

Article no.:

4. Order submittal sheet

Please copy the order sheet and fax it to PSI Products GmbH
 Telefax +49(0)7473/3781-87

Link-Seal® modular seal calculation online:
www.psi-products.de

Quantity	Type	Version	Article no.	Total

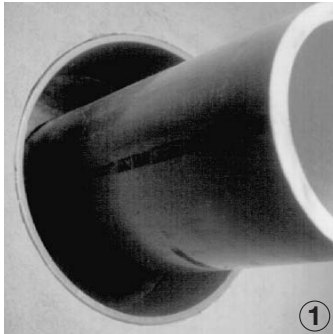
For further information please contact PSI GmbH. We apply our General Terms and Conditions to all orders. Subject to technical changes. The user must ensure that the chosen product is suitable for his application. Our warranty is limited to the replacement of defective material. For prices see our current price list.

Despatched by:

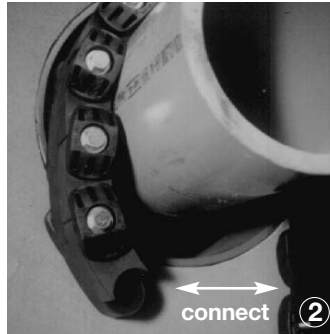
Date/signature

Link-Seal® Modular Seals, rubber with KTW/W270 approval

Installation Instruction



Centre the pipe, cable or conduit in wall opening or casing. Make sure the pipe is adequately supported at both ends. Link-Seal® modular seals are not intended to support the weight of the pipe.



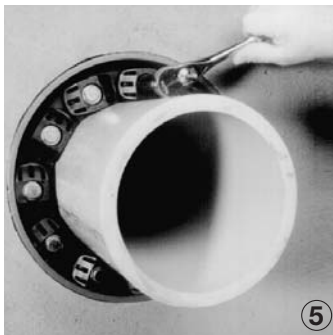
Loosen rear pressure plate with nut just enough so that the links move freely towards and away from each other. Connect both ends of the belt.



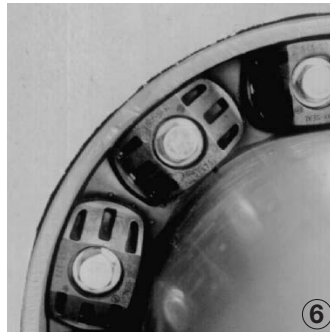
Check to be sure bolt heads are facing the installer. Sagging is normal. Do not remove links in case of sagging. It may be necessary for smaller pipes that the belt must be stretched when installing!



Slide belt assembly into annular space. For larger size belts, start inserting Link-Seal® modular seal assembly at the 6 o'clock position and work both sides up toward the 12 o'clock position in the annular space.



Start at 12 o'clock position. Tighten every bolt in a clockwise manner. Tighten only by hand!



Do not tighten any bolt more than 4 turns at a time. Continue in a clockwise manner. Make 2 or 3 more passes at 3 turns per bolt until links have been uniformly compressed and the max. torque (see table) is reached.



Repeat tightening after approx. 2 hours. Especially the Link-Seal® types LS 500 up to LS 700 have to be tightened several times depending on the installation conditions (annular space, temperature, etc.) has to be tightened again for several times.

completed assembly ⑦

Max. torque at 23°C			Type
for types C, S316 rubber black O and OS316 rubber green type T rubber grey Shore 50°± 5°	for types BC and BS316 rubber blue, Shore 40°± 5°	for types LS version KTW/W270 Shore 50°± 5°	
2 Nm	2 Nm	2 Nm	LS 200 to LS 275
8 Nm	6 Nm	8 Nm	LS 300 to LS 360
27 Nm	20 Nm	27 Nm	LS 400 to LS 475
65 Nm	50 Nm	65 Nm	LS 500 to LS 575
110 Nm	65 Nm	–	LS 615
65 Nm	50 Nm	65 Nm	LS 625 to LS 700

Link-Seal® Modular Seals, rubber with KTW/W270 approval

Installation Instruction



Please consider the right equipment when you install Link-Seal®



Link-Seal® modular seals – Do's

1. Make sure pipe is centred.
2. Install the belt with the pressure plates evenly spaced.
3. Install the belt and pay attention to the fact that the pressure plates are evenly aligned.
4. Check to make sure pipe is supported properly during backfill operations.
5. Make sure seal assembly and pipe surfaces are free from dirt.



Link-Seal® modular seals – Don'ts

1. Do not fit the belt as long as the pressure plates are not aligned.
2. Don't install Link-Seal® modular seals with spiral pipes.
3. Don't torque each bolt completely before moving on to the next.
4. Do not use high speed power tools.
5. Please note that the Link-Seal® is not a fixing point.

PSI warranty is limited to the replacement of faulty material. The user himself is responsible for checking if the products he is using are suitable for his application.

Original Link-Seal® type KTW Selection Table



Selection for core drilled holes

core drilled holes	LS		Selected seal	
	Medium pipe Ø _a [mm] from	- to	Quantity of elements	Type LS ...
50	10	- 18	4	275
80	40	- 48	8	275
	48	- 53	7	200
100	32	- 45	5	340
	48	- 57	6	315
	55	- 64	6	300
	62	- 68	10	275
	68	- 75	9	200
125	42	- 61	5	360
	58	- 74	7	340
	73	- 82	8	315
	80	- 89	8	300
	87	- 90	13	275
	95	- 100	12	200
150	53	- 67	5	475
	58	- 76	5	410
	66	- 82	6	360
	82	- 99	9	340
	105	- 114	10	300
	118	- 125	14	200
200	90	- 104	6	575
	103	- 117	7	475
	103	- 124	7	410
	116	- 133	9	360
	132	- 149	13	340
	155	- 164	14	300
	250	134	- 154	8
140		- 160	6	440
153		- 163	9	475
158		- 177	7	400
166		- 186	12	360
178		- 192	7	425
190		- 203	9	325
206		- 212	18	300
300		157	- 173	7
	184	- 204	10	575
	190	- 210	8	440
	208	- 226	12	410
	216	- 236	15	360
	234	- 244	20	340
	240	- 253	11	325
	350	182	- 210	8
207		- 229	9	500
223		- 239	9	525
234		- 254	12	575
253		- 267	14	475
253		- 274	14	410
266		- 286	18	360
258		- 274	10	400
276		- 293	11	425
286		- 296	24	340
294		- 303	13	325

Original Link-Seal® type KTW Selection Table



Selection for core drilled holes

core drilled holes	LS		Selected seal	
	Medium pipe from	Ø _a [mm] - to	Quantity of elements	Type LS ...
400	204	- 234	9	625
	234	- 255	9	650
	264	- 279	11	500
	273	- 289	11	525
	284	- 304	14	575
	292	- 310	11	440
	303	- 317	16	475
	308	- 327	12	400
	326	- 341	12	425
	340	- 353	15	325
450	254	- 282	10	625
	285	- 311	11	650
	307	- 329	12	500
	327	- 339	12	525
	335	- 354	16	575
	345	- 356	13	440
	355	- 367	19	475
	358	- 377	14	400
	376	- 393	14	425
	375	- 386	24	360
	390	- 403	17	325
	500	304	- 334	12
335		- 359	12	650
357		- 379	14	500
373		- 389	14	525
385		- 400	18	575
390		- 410	14	440
408		- 427	15	400
426		- 443	16	425
440		- 453	19	325
600		404	- 434	15
	436	- 457	15	650
	457	- 479	17	500
	473	- 489	17	525
	490	- 503	17	440
	503	- 509	25	475
	508	- 527	19	400
	526	- 543	19	425
	540	- 553	23	325

All other sizes on request!

Available in the versions:

Type KTW / W270*: EPDM rubber (black with blue KTW/W270 marking),
Pressure plates blue, screws V4A stainless steel



*Elastomer tested in accordance with KTW and W270