

Pressio®
Wall Penetration Seals
4 pipes







#### The high performance pipeline wall penetration seal



#### **Product information**

**Pressio®-Rings Seals** work as high quality seals against high and low external water pressure in wall penetrations of pipes and cables.

**Pressio® Seals** are the most secure type for sealing wall penetrations for pipelines. This seal is basically tight against high and low external water pressure with pressure plates made of V2A stainless steel and extra soft rubber.

#### **Usage**

**Gas and water tight closure** between carrier and casing pipe or core hole with a 40 mm thick rubber element (alternatively with two 40 mm rubber elements) which is compressed between 2 steel discs.

#### **Approval and test**

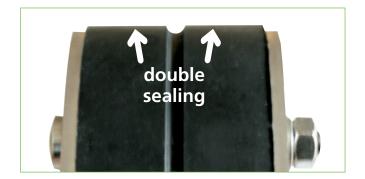
- Pressure tight up to 5.0 bar\*
- Drinking water quality acc. to DVGW W270, Elastomer Guideline of UBA/KTW
- Radon tight
- \*from 3 bar on, the seal has to be secured to prevent movement.

#### **Advantages**

- fast mounting
- can be produced individually according to customer requirements
- usable at various building and plant applications
- pressure plates are made of stainless steel
- suitable for applications with high or low external water pressure
- Special elastomers possible, e.g. potable water EPDM or nitrile for gas or oil resistance

#### Please note:

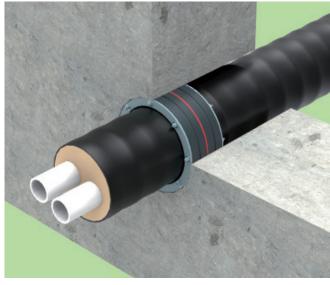
- Core bore should be coated with epoxy to protect the concrete and smoothen any possible cavities/grooves
- For retrofit installation a split Pressio® Seal is available
- Pipes have to be centered and supported
- Pressio® wall penetration seals do not provide any kind of pipe bedding or anchor point





Preinsulated pipe wall penetration seal 2x40 mm Special design for district heating and cooling pipes





#### **Product information**

Pressio®-Rings Type FW wall penetration seals are engineered for flexible and PE-jacket preinsulated pipe systems.

- Available in special preinsulated pipe dimensions in 1x40 mm and 2x40 mm version
- Special version with integrated cable feedthrough for monitoring and fiber optic systems
- Extra soft rubber allows **low tightening torque** with low danger of pipe deformation
- Special dimensions consider the pipe tolerances of the EN 253 and e.g. the ovalities of flexible pipes
- MFPA certified up to 5 bar pressure
- Individual dimensions possible
- Facilitates minimal pipe movement and angling

#### Please note:

- Core hole should be coated with epoxy to protect the concrete and smoothen any possible cavities/grooves
- For retrofit installation a split Pressio® Seal is available
- Pipes have to be centered and supported
- Pressio® wall penetration seals do not provide any kind of pipe bedding or anchor point



Pressio®-Rings 2 x 40 mm Rubber with 2 x 16 mm extra holes including reducing inserts and blind plugs



Pressio®-Rings 2 x 40 mm Rubber with 4 x 16 mm extra holes including reducing inserts and blind plugs



			Standard	Split version	District heating
Standar	d dimen	sions			
Core hole/ wall sleeve		er pipe n mm	Stainless steel pressure plates bolts V2A Rubber size 1 x 40 mm Rubber: EPDM	Stainless steel pressure plates, split Version, bolts V2A Rubber size 1 x 40 mm Rubber: EPDM	Stainless steel pressure plates bolts V2A Rubber size 2x40 mm Rubber: EPDM
mm	min.	max.	ArtNo.	ArtNo.	ArtNo.
50	6	12	10500	10600	-
70	10	22	10505	10605	-
70	24	32	10506	10606	*
70	32	41	10507	10607	*
80	20	28	10510	10610	*
80	28	32	10514	10614	*
80	32	40	10511	10611	*
80	40	50	10512	10612	-
100	15	22	10515	10615	-
100	20	28	10516	10616	*
100	25	32	10517	10617	*
100	32	40	10518	10618	*
100	36	44	10519	10619	*
100	41	51	10489	*	*
100	46	56	10520	10620	*
100	55	65	10521	10621	*
125	35	40	10523	10623	-
125	45	50	10524	10624	-
125	55	64	10525	10625	10702
125	61	70	10526	10626	10700
125	70	78	10527	10627	10701
150	35	40	10529	10629	*
150	46	54	10530	10630	10703
150	56	66	10531	10631	10704
150	69	78	10532	10632	10705
150	79	91	10533	10633	10708
150	85	94	10534	10634	10706
150	90	97	10536	10636	10745
150	98	110	10535	10635	10707
150	110	114.3	10537	10637	10762
187**	69	78	01563	01663	10763
187**	88	103	01564	01664	10764
187**	108	115	01565	01665	10765
187**	119	128	01566	01666	10766
187**	135	144	01567	01667	10767
200	88	103	10540	10640	10709
200	108	115	10541	10641	10710
200	116	126	10542	10642	10713
200	119	128	10543	10643	10711
200	125	135	10547	10647	10760
200	132	141	10544	10644	*
200	135	144	10545	10645	10712
200	140	150	10548	*	10761
200	150	160	10546	10646	10714

<sup>\*</sup>Available on request / Pressio® Individual special version up to DN 3000 on request

<sup>\*\*</sup>made for KG/KG2000 casing pipes



			Standard	Split version	District heating
Standard	Standard dimensions				
Core hole/ wall sleeve		er pipe n mm	Stainless steel pressure plates Bolts V2A Rubber size 1 x 40 mm Rubber: EPDM	Stainless steel pressure plates, split Version, bolts V2A Rubber size 1 x 40 mm Rubber: EPDM	Stainless steel pressure plates bolts V2A Rubber size 2x40 mm Rubber: EPDM
mm	min.	max.	ArtNo.	ArtNo.	ArtNo.
250	135	144	10550	10650	10715
250	140	149	10551	10651	10716
250	150	159	10552	10652	10717
250	156	165	10553	10653	10718
250	165	175	10554	10654	10721
250	174	181	10555	10655	10719
250	178	187	10556	10656	10720
250	197	202	10557	10657	10722
250	204	210	10558	10658	10723
300	178	187	10565	10665	10725
300	193	204	10566	10666	10726
300	198	207	10567	10667	10727
300	218	226	10568	10668	10728
300	224	233	10564	10664	10724
300	242	251	10569	10669	10729
350	224	233	10570	10670	10730
350	233	243	10574	10674	10759
350	249	258	10571	10671	10731
350	270	282	10572	10672	10732
350	279	288	10573	10673	10733
400	270	280	10575	10675	10734
400	279	288	10576	10676	10735
400	304	313	10577	10677	10736
400	314	323	10578	10678	10737
400	320	330	10579	10679	10738
500	354	364	01582	01682	10750
500	392	402	01583	01683	10752
500	400	412	01584	01684	10751
500	421	431	01585	01685	*
600	450	464	01588	01688	10755
600	494	504	01589	01689	*
600	500	515	01590	01690	10756
600	524	534	01591	01691	*

<sup>\*</sup>Available on request/ Pressio® Individual special version up to DN 3000 on request



			V4A / 1.4571	Drinking water	Blind
Standard	dimensio	ons			
Core hole/ wall sleeve		er pipe n mm	Stainless steel pressure plates and bolts V4A rubber: EPDM	Stainless steel pressure plates and bolts V2A, rubber: EPDM with KTW/W 270 approval**	Blind stainless steel pressure plates, bolts V2A rubber: EPDM
mm	min.	max.	ArtNo.	ArtNo.	ArtNo.
50	6	12	10300	10800	10585
70	10	22	10305	10805	
70	24	32	10306	10806	10586
70	32	41	10307	10807	
80	20	28	10310	10810	10507
80	32	40	10311	10811	10587
100	15	22	10315	10815	
100	20	28	10316	10816	
100	25	32	10317	10817	
100	32	40	10318	10818	10596
100	36	44	10319	10819	
100	46	56	10320	10820	
100	55	65	10321	10821	
125	55	64	10325	10825	
125	61	70	10326	10826	10597
125	70	78	10327	10827	
150	46	54	10330	10830	
150	56	66	10331	10831	
150	69	78	10332	10832	
150	79	91	10333	10833	10598
150	85	94	10334	10834	
150	98	110	10335	10835	
200	88	103	10340	10840	
200	108	115	10341	10841	
200	116	126	10342	10842	
200	119	128	10343	10843	
200	125	135	*	*	10591
200	132	141	10344	10844	10001
200	135	144	10345	10845	
200	140	150	*	*	
200	150	160	10346	10846	
250	135	144	10350	10850	
250	140	149	10350	10851	
250	150	159	10351	10852	
250	156	165	10352	10853	
250	165	175	10353	10854	10592
250	174		10354	10855	10332
250	174	181	10355	10855	
250		187	10356	10857	
	197	202			
250	204	210	10358	10858	1

<sup>\*</sup>Available on request / Pressio® individual special version up to DN 3000 on request Rubber quality: NBR and KTW/W270 for Pressio seal with split version on request

 $<sup>\</sup>star\star$  according to DVGW W270, Elastomer Guideline of UBA / KTW  $\bf Attention:$  non-stock item



			V4A / 1.4571	<b>Drinking water</b>	Blind
Standard (	Standard dimensions				
Core hole/ wall sleeve		r pipe n mm	Stainless steel pressure plates and bolts V4A rubber: EPDM	Stainless steel pressure plates and bolts V2A, rubber: EPDM with KTW/W 270 approval**	Blind stainless steel pressure plates, bolts V2A rubber: EPDM
mm	min.	max.	ArtNo.	ArtNo.	ArtNo.
300	178	187	10365	10865	
300	193	204	10366	10866	10593
300	198	207	10367	10867	10593
300	218	226	10368	10868	
350	224	233	10370	10870	
350	249	258	10371	10871	10594
350	270	282	10372	10872	
400	270	280	10375	10875	
400	279	288	10376	10876	
400	304	313	10377	10877	10595
400	314	323	10378	10878	
400	320	330	10379	10879	
500	354	364	01382	10882	
500	392	402	01383	10883	*
500	400	412	01384	10884	"
500	421	431	01385	10885	
600	450	464	01388	10888	
600	494	504	01389	10889	*
600	500	515	01390	10890	<u>"</u>
600	524	534	01391	10891	

<sup>\*</sup>Available on request / Pressio® individual special version up to DN 3000 on request Rubber quality: NBR and KTW/W270 for Pressio® seal with split version on request

 $<sup>\</sup>ensuremath{^{**}}$  according to DVGW W270, Elastomer Guideline of UBA / KTW  $\ensuremath{^{Attention:}}$  non-stock item



# Pressio®-Rings wall penetration seals specially designed for additional cable feedthroughs in the same wall penetration



Pressio®-Rings with 4 x 6 – 16 mm drill holes, incl. inserts and blind plug



Pressio®-Rings

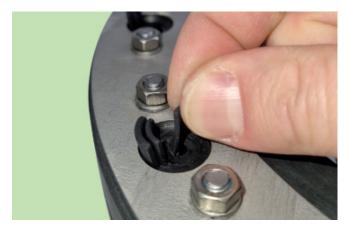
2 x 40 mm rubber with

4 x 6 - 16 mm drill holes,
incl. inserts and blind plur

# . inserts and blind plug 4 x 6 - 16 mm drill holes, incl. inserts and blind plug

#### **Product Information**

These Pressio® Rings wall penetration seals are manufactured with **up to four additional cable feedthrough holes**, making it possible to securely seal **cables**, **fibre-glass speedpipes** or thin pipes in the same wall penetration. These seals are absolutely tight in case of external water pressure, with pressure plates made of rust-free stainless steel V2A and extra soft elastomer. The inserts for the additional cable feedthrough holes fit inside each other in an onion-ring system that ensures a cable with any required diameter can be fed through easily and



securely. A blind plug can be left in any of the unused cable feedthrough holes in the seal.

#### Please note:

- Core holes should be coated with epoxy resin to protect the concrete and smooth over any possible cavities or grooves
- All carrier pipes have to be supported
- Pressio® wall penetration seals do not provide any kind of pipe bedding or anchor point.

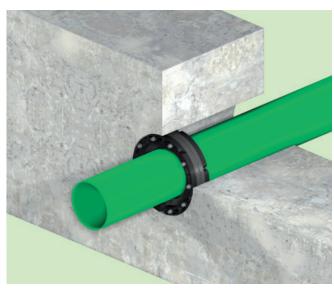
8 - 10 r	*Sealing range cable outlet 8 - 10 mm with insert 14 - 16 mm without insert		Pressio®-Rings with 2 x 16 mm extra outlets incl. inserts and blind plugs*	Pressio®-Rings with 2 x 16 mm extra outlets incl. inserts and blind plugs*
OD	Carrie	r pipe	Rubber width 1 x 40 mm EPDM	Rubber width 2 x 40 mm EPDM
mm	min.	max.	Art-No.	Art-No.
150	69	78	01500	01700
150	85	94	01501	01701
200	108	115	01502	01702
200	119	128	01503	01703
200	135	144	01504	01704
250	156	165	01505	01705
250	178	187	01506	01706
300	193	204	01507	01707
300	224	233	01508	01708

* Sealing range cable outlet from 6 up to 16 mm			Pressio®-Rings with 4 x 16 mm extra outlets incl. inserts and blind plugs*	Pressio®-Rings with 4 x 16 mm extra outlets incl. inserts and blind plugs*
OD	Carrie	r pipe	Rubber width 1 x 40 mm EPDM	Rubber width 2 x 40 mm EPDM
mm	min.	max.	Art-No.	Art-No.
250	156	165	01545	01745
250	178	187	01546	01746
300	193	204	01547	01747
300	224	233	01548	01748

# Pressio®-Rings BlackLine wall penetration seals 4 pipes







#### **Product information**

Pressio® Rings BlackLine is our new series of sealing rings with pressure plates made from glass-fibre reinforced polyamide. They are used to seal wall penetrations for pipes and cables against high or low external water pressure.

Pressio® Rings are the most secure way of sealing wall penetrations for pipelines.

#### **Usage**

Gas and water tight closure between carrier and casing pipe or core hole with a 40 mm thick rubber element (alternatively with two 40 mm rubber elements) which is compressed between two polymer pressure plates.

#### **Approval and test**

- pressure tight up to 1.5 bar
- tight against radon gas

#### **Advantages**

- fast and easy installation
- pressure plates made from high strength polyamide PA6-30
- tight against high external water pressure
- Split seal can be used for retrofit application
- offset pressure plate placement allows very simple retrofit installation

Max torque tightening in Nm					
bolt size	height of pressure plate	for standard pipes	for thin walled plastic pipes		
M6	18 mm	5 Nm	5 Nm		
M8	22 mm	10 Nm	8 Nm		

#### Please note:

- Core holes should be coated with epoxy resin to protect the concrete and smooth over any possible cavities or grooves
- To carry out any subsequent installations, just remove one of the bolts next to the separation point to open the seal
- Carrier pipes have to be centred and supported
- Pressio® wall penetration seals do not provide any kind of pipe bedding or anchor point



The 4 pipes warranty only applies to faulty material. Checking the suitability of the product for the individual application is solely the responsibility of the user.

# Pressio®-Rings BlackLine Type FW wall penetration seals 4 pipes





#### **Product information**

Pressio®-Rings BlackLine type FW is our new series of sealing rings with pressure plates made from glass-fibre reinforced polyamide. They are **especially designed for flexible and PE-jacked preinsulated pipe systems for district heating** and are gastight and withstand also high external water pressure.

- Available in special preinsulated pipe dimensions in 1x 40 mm and 2x 40 mm version
- Extra soft rubber allows low tightening torque with low danger of pipe deformation
- Special dimensions consider the pipe tolerances of the EN 253 and e.g. the ovalities of flexible pipes
- IAF certified radon tightness
- Facilitates minimal pipe movement and angling

#### Usage

**Gas- and water tight sealing** between carrier and casing pipe or core hole with two 40 mm rubber elements which are compressed between two polymer pressure plates.

#### **Approval and test**

- Pressure tight up to 1.5 bar
- Tight against radon gas

#### **Advantages**

- Fast and easy installation
- Pressure plates made from high strength polyamide PA6-30
- Gas- and water tight against high external water pressure
- Split seal can be used for retrofit application
- Offset pressure plate placement allows very simple retrofit installation

	Max torque tightening in Nm					
bolt size	height of pressure plate	for standard pipes	for thin walled plastic pipes			
M6	18 mm	5 Nm	5 Nm			
M8	22 mm	10 Nm	8 Nm			

#### Please note:

- Core holes should be coated with epoxy resin to protect the concrete and smooth over any possible cavities or grooves
- To carry out any subsequent installations, just remove one of the bolts next to the separation point to open the seal
- Carrier pipes have to be centered and supported
- Pressio® wall penetration seals do not provide any kind of pipe bedding or anchor point

The 4 pipes warranty only applies to faulty material. Checking the suitability of the product for the individual application is solely the responsibility of the user.

# Pressio®-Rings BlackLine wall penetration seals 4 pipes



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			Split version	District heating	Blind
Standard	dimensio	ons			
Core hole/ wall sleeve		er pipe n mm	Pressure plates PA6-30 split version bolts S316 Ti rubber 1 x 40 mm EPDM	Pressure plates PA6-30 split version bolts S316 Ti rubber 2 x 40 mm EPDM	Blind Pressure plates PA6-30 bolts S316 Ti rubber 1 x 40 mm EPDM
mm	min.	max.	ArtNo.	ArtNo.	ArtNo.
80	20	28	55610	-	
80	28	32	55614	-	55587
80	32	40	55611	-	55587
80	40	50	55612	-	
100	20	28	55616	-	
100	25	32	55617	-	
100	32	40	55618	-	55500
100	36	44	55619	-	55588
100	46	56	55620	-	
100	55	65	55621	-	
125	55	64	55625	-	
125	61	70	55626	55700	55589
125	70	78	55627	55701	
150	46	54	55630	-	
150	56	66	55631	55704	
150	69	78	55632	55705	
150	79	91	55633	55708	55590
150	85	94	55634	55706	
150	90	97	55636	-	
150	98	110	55635	55707	
200	108	115	55641	55710	
200	116	126	55642	55713	
200	119	128	55643	55711	
200	132	141	55644	-	55591
200	135	144	55645	55712	
200	140	150	55648	55761	
200	150	160	55646	55714	
250	135	144	55650	55715	
250	140	149	55651	55716	
250	150	159	55652	55717	
250	156	165	55653	55718	
250	165	175	55654	55721	_
250	174	181	55655	55719	
250	178	187	55656	55720	
250	197	202	55657	55722	
250	204	210	55658	-	
300	178	187	55665	55725	
300	193	204	55666	55726	
300	198	207	55667	55727	
300	218	226	55668	55728	-
300	224	233	55664	55724	
300	242	251	55669	55729	
350	242	258	55671	55731	
350	270	282	55672		-
0دد	2/0		33072	-	

## Pressio® Individual wall penetration seals 4 pipes



#### Your custom-made Pressio® wall penetration seal



#### **Product information**

Pressio® Individual Seals are engineered and custom-made at 4 pipes to solve individual problems on site.

#### **Production options**

- Multiple seals
- Oval/square outside
- Not centered
- Split or closed possible
- Dimensions up to DN 3000 possible
- Standard elastomer EPDM
- Special elastomers available (NBR, Viton, Silicone etc.)

for e.g. - high temperatures

- Chemicals
- Oils/natural gas
- potable water etc.
- Width 1x40 mm or 2x40 mm
- Pressure plates in various stainless steel qualities available
- To optimise production and functioning, we need your input.
   Please refer to the template on the next page and consider all details.

#### Attention: fast delivery!

Express production is available at a premium.

#### Please note:

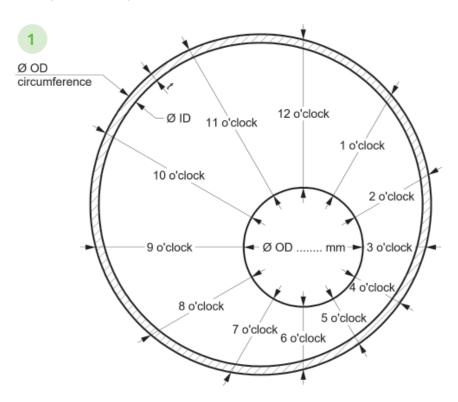
- Core bore should be coated with epoxy to protect the concrete and smoothen any possible cavities/grooves
- For retrofit installation a split Pressio® Seal is available
- Pipes have to be centered and supported
- Pressio® wall penetration seals do not provide any kind of pipe bedding or anchor point

The 4 pipes warranty only applies to faulty material. Checking the suitability of the product for the individual application is solely the responsibility of the user.

# Pressio® Individual wall penetration seals 4 pipes



#### **Example of a Template**



# 2 12 o'clock position A Ø OD circumference Ø OD ...... mm Ø OD ...... mm B B B B C

#### **Guideline technical input:**

- Rubber
  - 1 x 40 mm
  - 2 x 40 mm
- Elastomer
  - EPDM
  - Nitrile
  - Viton
  - EPDM-KTW (drinking water)
  - Silicone
- Pressure plates
  - V2A
  - V4A / 1.4571
  - Steel spec.
- Dimension
  - split
  - closed
  - oversize flange
- Kind of pipe
- Tolerances
- Crane eyelet
- Handles

Please provide your original measured sizes so 4 pipes can design your seal with the correct cutting dimensions.



Character	Pressio® Seal Standard EPDM	Pressio® Seal for drinking water	Pressio® Seal for preinsulated pipes	Pressio® Seal BlackLine EPDM	Pressio® Individual
Core bore min/max	50 - 600 mm	50 - 2000 mm	125 - 600 mm	80 - 350 mm	40 - 3000 mm
Material pressure plate	V2A	V2A V4A on request	V2A	PA 6-30	Standard V2A, V4A / Epoxy coating on request
Rubber quality	EPDM	EPDM	EPDM	EPDM	EPDM EPDM with KTW/W 270* NBR (Nitrile) Silicone
Temperature	-30°C up to +120°C	-30°C up to +120°C	-30°C up to +120°C	-30°C up to +80°C	EPDM -30°C up to + 120°C NBR -30°C up to + 70°C Silicone -55°C bis + 200°C
Pressure rating	3.0 bar. held in place up to 5.0 bar	3.0 bar. held in place up to 5.0 bar	3.0 bar. held in place up to 5.0 bar	1.5 bar	1.5 bar**
Rubber thickness***	40 mm	40 mm	80 mm	40 mm / 80 mm	up to core hole 800 mm 1 x 40 mm rubber for core hole 800 mm and larger: 2 x 40 mm rubber
Rubber durometer, Shore A	45 ± 5	55 ± 5	45 ± 5	45 ± 5	Standard EPDM, EPDM with KTW ELL/W 270 and NBR 50 ± 5 Silicone 50 ± 5
UV-resistance	good	good	good	good	EPDM good NBR bad

Values for pressure rating at 23°C. At higher temperatures, a holding fixture has to be installed.

- \* EPDM-KTW rubber tested accord. KTW drinking water test and W270.
- \*\* For annular spaces >100 mm, the seal should be held in place by further accessories.
- \*\*\* Tolerance ± 1 mm

# Drinking water KTW/W270

#### Further Pressio seal types are also available on request.





Holding fixture M6 and M8





Pressio® individual, split, potable water, non centric



Seal with fixed-loose flange

# Installation guide Pressio®-Rings wall penetration seals 4 pipes





Standar



Standar split



Standard Type FW



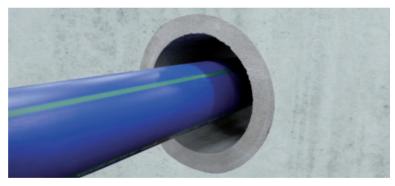
BlackLine split



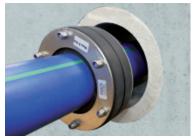
BlackLine Type FW split

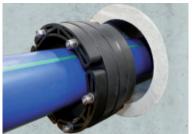


Individual closed/split



- 1. Clean the casing pipe/core bore and carrier pipe.
- 2. Check the casing pipe/core bore diameter and carrier pipe diameter against sealing range data written on the Pressio® seal.





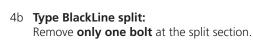
3. Push the seal on the carrier pipe.

**Attention**: Orientation of the nuts towards the inside of the building for later retightening.

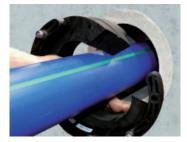




4a **Type Standard split:**Dismantle the seal at the split section.

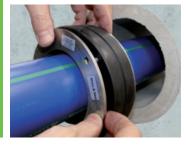






5. Fold the split seal around the carrier pipe.

**Attention**: Orientation of the nuts towards the inside of the building for later retightening.





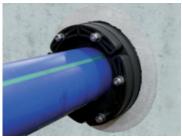
6. Reassamble the Pressio® seal on the carrier pipe.

For subsequent installation

# Installation guide Pressio®-Rings wall penetration seals 4 pipes







7. Push the Pressio® seal into the casing pipe or the core bore.





8. Insert the Pressio® seal into the wall and place it flush with the outside of the building.





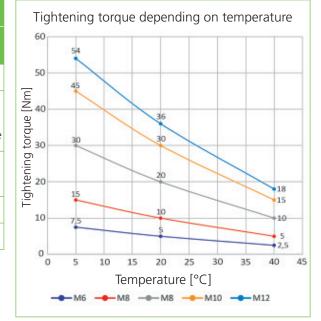
9. Use a torque wrench to tighten the nuts according to the below table.

**Attention:** Tighten the nuts in a clockwise pattern. Each nut is to be turned approx. three times. Several passes will be necessary until the torque value is achieved.

If necessary, retighten the nuts after 2 hours until the torque is reached.

Max. tightening torques in Nm				
Bolt	Standard pipes	For thin-walled plastic pipes		
M 6	5 Nm	5 Nm		
M 8	10 Nm for Pressio® Standard, Standard split, Standard Type FW and BlackLine	8 Nm for Pressio® Standard, Standard split, Standard Type FW and BlackLine		
	20 Nm for Pressio® Individual and Pressio® Type KTW/W270	15 Nm for Pressio® Individual		
M 10	30 Nm	22 Nm		
M 12	36 Nm	26 Nm		

The 4 pipes warranty is limited to the replacement of faulty material. The usability of the product for the individual application is completely the responsibility of the user.





# Pressio® Universal wall penetration seals 4 pipes with onion ring technology







Pressio® Universal Seals can be used as a blind seal or single duct. Because of its soft rubber the Pressio Universal Seals are especially suitable for plastic pipes. The sealing range for the duct of a pipe/cable is stepped with rubber blades and therefore usable for various outside diameters.

**Advantages** 

- gas- and watertight
- 5 seals for 80% of the popular pipe sizes
- stock levels can be kept low
- fast mounting
- blade technology with large application range
- split version with snap-in closure
- double sealing
- extendable with extension rings 4 pipes

Pressio® Universal Seals do not provide any kind of pipe bedding or anchor point.

Technical data					
Material pressure plate	V2A				
Rubber thickness*	40 mm				
Rubber quality	EPDM				
Rubber grade, Shore A	45 ± 5				
Temperature	-30°C up to +120°C				

<sup>\*</sup> Tolerance ± 1 mm

Further Pressio® Universal Seal types (e.g. with extralarge flange) are also available on request.





Pressio® Universal KB 250 mm and KB 300 closed

# Pressio® Universal wall penetration seals 4 pipes with onion ring technology



Ø in mm	Product	ArtNo.		
	Pressio® UNIVERSAL OD 100 mm, closed			
100	For carrier pipe OD:  18 up to 65 mm in 5 mm steps per ring Pressure rating as blind closure: 1.5 bar Pressure rating with carrier pipe:  Supplied incl. blind plug	10490		
100	Pressio® UNIVERSAL OD 100 mm, closed with extra large flange  For carrier pipe OD:  18 up to 65 mm in 5 mm steps per ring  Pressure rating as blind closure: Pressure rating with carrier pipe:  Supplied incl. blind plug	10488		
100	Pressio® UNIVERSAL OD 100 mm, split  For carrier pipe OD: 18 - 20, 25, 32, 40, 50, 63 mm  Pressure rating as blind closure: 1.5 bar  Pressure rating with carrier pipe: 1.5 bar  Supplied incl. blind plug	10499		
150	Pressio® UNIVERSAL OD 150 mm, closed  For carrier pipe OD: 32, 40, 50, 60.3 up to 63 mm, 75 up to 76.1 mm, 88.9 up to 90 mm, 110 mm  Pressure rating as blind closure: for low external water pressure  Pressure rating with carrier pipe: 1.0 bar  Supplied incl. blind plug	10495		
200	Pressio® UNIVERSAL OD 200 mm, closed  For carrier pipe OD: 110, 125 mm, 139.7 up to 140 mm, 160 mm  Pressure rating as blind closure: for low external water pressure  Pressure rating with carrier pipe: 1.0 bar  Supplied incl. blind plug	10493		
250	Pressio® UNIVERSAL OD 250 mm, closed  For carrier pipe OD: 200 mm Reduction rings for carrier pipe OD: 160, 180 mm Pressure rating as blind closure: for low external water pressure Pressure rating with carrier pipe: 0.5 bar  Supplied incl. reduction rings and PP blind plug	10496		
300	Pressio® UNIVERSAL OD 300 mm, closed  For carrier pipe OD: 250 mm Reduction rings for carrier pipe OD: 200, 225 mm Pressure rating as blind closure: for low external water pressure Pressure rating with carrier pipe: 0.5 bar  Supplied incl. reduction rings and PP blind plug	10497		

The above-mentioned values refer to a pressure tightness rating at an operating temperature of 23°C. If the temperature is different, especially higher, a holding fixture has to be mounted.

# Pressio® Universal BlackLine wall penetration seals with onion ring technology



Ø in mm	Product	ArtNo.
80	Pressio® UNIVERSAL BlackLine OD 80 mm, split  For carrier pipe OD: 25 - 50 mm  Pressure rating as blind closure: 1.5 bar  Pressure rating with carrier pipe: 1.5 bar  Supplied incl. blind plug	55487
100	Pressio® UNIVERSAL BlackLine OD 100 mm, split  For carrier pipe OD: Pressure rating as blind closure: Pressure rating with carrier pipe: Supplied incl. blind plug  1.5 bar 1.5 bar	55499
150	Pressio® UNIVERSAL BlackLine OD 150 mm, split  For carrier pipe OD:  32, 40, 50, 60.3 up to 63 mm, 75 up to 76.1 mm, 88.9 up to 90 mm, 110 mm  Pressure rating as blind closure: Pressure rating with carrier pipe: Supplied incl. blind plug	55495
200	Pressio® UNIVERSAL BlackLine OD 200 mm, split  For carrier pipe OD: Pressure rating as blind closure: Pressure rating with carrier pipe: Supplied incl. blind plug  110, 125, 139.7 up to 140 mm, 160 mm for low external water pressure 0.5 bar	55493
250	Pressio® UNIVERSAL BlackLine OD 250 mm, split  For carrier pipe OD: 200 mm incl. reduction rings for pipe OD: 160, 180 mm Pressure rating as blind closure: for low external water pressure Pressure rating with carrier pipe: 0.5 bar Supplied incl. reduction rings (can be split) and PP blind plug	55496
300	Pressio® UNIVERSAL BlackLine OD 300 mm, split  For carrier pipe OD: 250 mm incl. reduction rings for pipe OD: 200, 225 mm Pressure rating as blind closure: for low external water pressure Pressure rating with carrier pipe: 0.5 bar Supplied incl. reduction rings (can be split) and PP blind plug	55497

The above-mentioned values refer to a pressure tightness rating at an operating temperature of 23°C. If the temperature is different, especially higher, a holding fixture has to be mounted.

## Installation guide Pressio® Universal wall penetration seals 4 pipes





Standard UNIVERSAL closed/split



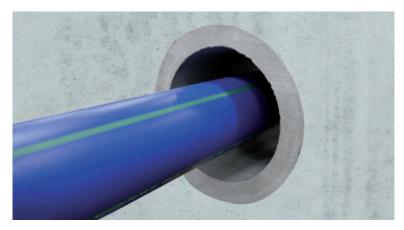
Standard UNIVERSAL (from OD 250) closed



BlackLine UNIVERSAL split



BlackLine UNIVERSAL (from OD 250) split



- 1. Clean the casing pipe/core bore and carrier pipe.
- 2. Check the casing pipe/core bore diameter and carrier pipe diameter against sealing range data written on the Pressio® seal.





 Count the slats to be removed for the corresponding pipe diameter.
 If necessary, the seal can be split before subsequent installation.





4. To remove the slats, they are pressed through to the back and then cut off with a knife or pulled off by hand.

#### Type UNIVERSAL (from OD 250 mm)





Select the suitable reduction ring for the corresponding diameter of the carrier pipe and insert it into the inner diameter of the seal. For subsequent installation (Type BlackLine), the reduction ring can be split on site using a knife.

# Installation guide Pressio® Universal wall penetration seals 4 pipes







5. Push the seal on the carrier pipe.
For retrofitting reassamble the seal on the carrier pipe.

#### Attention:

Orientation of the nuts towards the inside of the building for later retightening.





6. Insert the Pressio® seal into the wall and place it flush with the outside of the building.





7. Use a torque wrench to tighten the nuts according to the below table.

#### Attention:

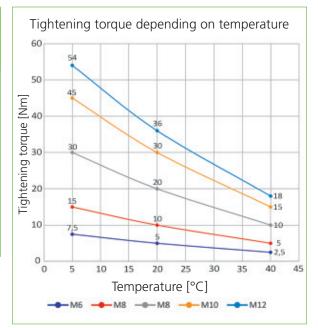
Tighten the nuts in a clockwise pattern. Each nut is to be turned approx. three times. Several passes will be necessary until the torque value is achieved. If necessary, retighten the nuts after 2 hours until the torque is reached.

Max. tightening torques in Nm							
Bolt	Standard pipes	For thin-walled plastic pipes					
M 6	5 Nm	5 Nm					
M 8	10 Nm for Pressio® Standard, Standard split, Standard Type FW and BlackLine	8 Nm for Pressio® Standard, Standard split, Standard Type FW and BlackLine					
	20 Nm for Pressio® Individual and Pressio® Type KTW/W270	15 Nm for Pressio® Individual					
M 10 30 Nm		22 Nm					
M 12 36 Nm		26 Nm					

The 4 pipes warranty is limited to the replacement of faulty material. The usability of the product for the individual application is completely the responsibility of the user.



Installation video



## Pressio® Extension-Rings 4 pipes







#### **Product information:**

Pressio® Extension-Rings serve as an easy, save and cost-effective feature to extend and adapt existing standard Pressio®-Wall-penetration seals 4 pipes to more unusual wall sleeve or core hole diameters.

The outside diameter of a standard seal is built up with the extension rings. An individually cut seal is not always necessary any more.

This facilitates cost-effective stockkeeping, even for uncommon seal sizes.

Pressio® Extension-Rings are made of high quality, extra soft Shore A 43  $\pm 5$  EPDM, similar to the Pressio 4 pipes standard seals.

The **integrated groove and tongue** works acc. to the principles of a modular system, ensuring a secure hold of the ring. In this way, the Pressio® Extension Ring maintains the principle of the double-sealing wall penetration seal. Seals with the Extension Rings are tight against high external water pressure up to 1.5 bar.

#### The application

of the Pressio®-Extension-Rings is very easy.

The ring with a corresponding inner diameter is **just pulled** over a standard Pressio® seal. The groove and tongue system should snap in!

Afterwards the complete seal is mounted like a standard Pressio® seal according to the application manual.

Attention, because of the groove and tongue system, the Extension-Rings are only compatible to original Pressio®-Wall Penetration Seals 4 pipes with ONE groove!

For Pressio® OD	Extension to	Description	ArtNo.
50 mm	58-60 mm	Pressio® - Extension 50 mm to 60 mm	08015
70 mm	75-79 mm	Pressio® - Extension 75 mm to 59 mm	08020
80 mm	85 mm	Pressio® - Extension 80 mm to 85 mm	08000
80 mm	90 mm	Pressio® - Extension 80 mm to 90 mm	08001
80 mm	93 mm	Pressio® - Extension 80 mm to 93 mm	08002
100 mm	103.6 mm	Pressio® - Extension 100 mm to 103.6 mm	08010
100 mm	110 mm	Pressio® - Extension 100 mm to 110 mm	08011
100 mm	118-120 mm	Pressio® - Extension 100 mm to 118-120 mm	08012
100 mm	125 mm	Pressio® - Extension 100 mm to 125 mm	08013
150 mm	158-160 mm	Pressio® - Extension 150 mm to 158-160 mm	08030

Do you sometimes have a number of non-standard core-drill holes, wall sleeve IDs or pipe IDs? Then get in touch with us – we will manufacture extension rings for your specific application.

