





Glasgow Tel: +44 (0) 141 620 1666 I sales@williamjohnston.co.uk

Inverness Tel: +44 (0) 1463 238 673 www.williamjohnston.co.uk

YOUR OFFICIAL UK DISTRIBUTOR FOR LINK-SEAL

I

General Information Selection Guide Order Submittal Sheet Installation Instruction

PSI Compakt-Seals

Compakt-Standard Compakt-Special Compakt-Varia



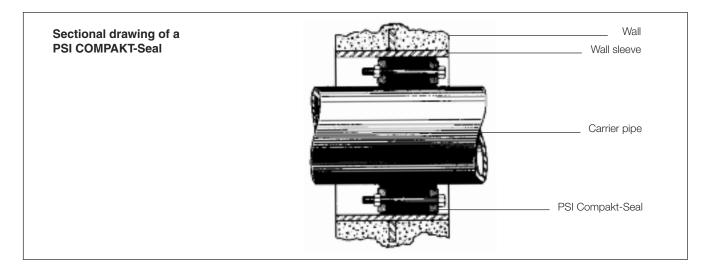
Pipeline Accessories

PSI Compakt-Seals General Information



| The Sealing System | The new PSI sealing system COMPAKT is the perfect complement to our Link-Seal [®] modular seal. It offers ideal sealing for wall opening of gas, water and sewage pipes as well as for cables. The COMPAKT seal is a pressure tight system. Pressure plates made of stainless steel. |
|--------------------|---|
| Description | The 40 mm wide rubber element is compressed by means of two metallic discs. The PSI COMPAKT seals the annular space between the carrier pipe and the casing pipe or the core drilled hole against water or gas. |
| Compakt Varia 1.5 | The COMPAKT Type Varia 1.5 is a flexible sealing system which can be used either as a blind seal or as a seal for pipes e.g. cables from O.D. 18 up to 65 mm. The "onion ring technology" allows small steps of 5 mm and therefore ensures a perfect tightness. |
| Accessories | PVC, Steel and asbestos-free fibre cement sleeves, KB epoxy resin. |

| | Compakt- Standard | Compakt FW for district heating pipes | Compakt-Varia 1.5 onion rings | Compakt-Special tailor made |
|----------------------|----------------------|---|----------------------------------|--------------------------------|
| pressure plates | V2A | V2A | V2A | V2A/VA4 possible |
| closed | Standard | Standard | Standard | Standard |
| split/open version | available | - | _ | available |
| pressure tightness | 2,0 bar | 2,0 bar | 1,5 bar | 1,5 bar |
| drinking water | no | no | no | yes on request |
| rubber thickness | 40 mm | 2 x 40 mm | 40 mm | < I.D. 800 40 mm |
| | | | | > I.D. 800 80 mm |
| rubber quality | EPDM | EPDM | NBR | EPDM or NBR |
| temperature range | -30°C up to +120°C | -30°C up to +120°C | -30°C up to +70°C | EPDM NBR -30°C up to +70°C |
| shore A | $45 \pm 5^{\circ}$ | 40 ± 5° | 50 ± 5° | 50 ± 5° |
| Wall opening min/max | 50 - 400 mm | 125 - 400 mm | 100 mm | 30 - 2200 mm |



PSI Compakt-Seals Selection Guide



| Please copy f and fax to PS Fax +44 (0) 14 | l Ltd | | t | | | | | | |
|--|-----------------|-------------|--------------------|--|------|--|------|--|--------------|
| Core drilled hole e.g. wall sleeve | Carrier in m | | Description | V2A- pressure pla bolts V2A | | V2A- pressure pla devided ver bolts V2/ | sion | Blind V2/ pressure pl devided ver bolts V2/ | ates sion |
| mm | min. | max. | | Part no. | pcs. | Part no. | pcs. | Part no. | pcs. |
| 50 | 6 | 12 | | * | | * | | * | |
| 70 | 10 | 22 | | * | | * | | | |
| 70 | 24 | 32 | Compakt | 4-023- 22328 | | 4-023- 22518 | | * | |
| 70 | 32 | 41 | Compakt | 4-023- 22329 | | 4-023- 22519 | | - | |
| 80 | 20 | 28 | Compakt | 4-024- 22330 | | 4-024- 22520 | | | |
| 80 | 32 | 40 | Compakt | 4-024- 22331 | | 4-024- 22521 | | 4-024- 22347 | |
| Compakt Varia 1, | 5 with oni | ion ring se | | | | | | | 1 |
| | 10 | 05 | | 4 000 00400 | | | | | |
| 100 | 18 | 65 | | 4-023- 22439 | | | | | |
| 100 | 15 | 22 | | * | | * | | | |
| 100 | 20 | 28 | Compakt | 4-023- 22380 | | 4-023- 22517 | | - | |
| 100 | 25 | 32 | Compakt | 4-023- 22651 | | 4-023- 22537 | | | |
| 100 | 32 | 40 | Compakt | 4-024- 22332 | | 4-024- 22522 | | 4-024- 22348 | |
| 100 | 36 | 44 | Compakt | 4-024- 22333 | | 4-024- 22523 | | - | |
| 100 | 46 | 56 | Compakt | 4-024- 22334 | | 4-024- 22524 | | | |
| 100 | 55 | 65 | Compakt | 4-024- 22335 | | 4-023- 22525 | | | |
| 19 (KG DN 125) | 45 | 54 | Compakt | 4-023- 22394 | | * | | | |
| 19 (KG DN 125) | 55 | 64 | Compakt | 4-023- 22395 | | * | | * | |
| 19 (KG DN 125) | 70 | 77 | Compakt | 4-023- 22396 | | * | | | |
| 125 | 55 | 64 | Compakt | 4-024- 22336 | | 4-024- 22526 | | 4-024- 22349 | |
| 125 | 70 | 78 | Compakt | 4-024- 22337 | | 4-024- 22527 | | 4-024- 22345 | |
| 150 | 46 | 54 | Compakt | 4-023- 22656 | | * | | | |
| 150 | 56 | 66 | Compakt | 4-023- 22657 | | * | | | |
| 150 | 69 | 78 | Compakt | 4-023- 22463 | | * | | | |
| 150 | 79 | 91 | Compakt | 4-024- 22338 | | 4-024- 22528 | | 4-024- 22350 | |
| 150 | 85 | 94 | Compakt | 4-023- 22382 | | * | | | |
| 150 | 98 | 110 | Compakt | 4-024- 22339 | | 4-024- 22529 | | | |
| 91 (KG DN 200) | 106 | 115 | Compakt | 4-023- 22397 | | * | | | |
| 91 (KG DN 200) | 117 | 126 | Compakt | 4-023- 22398 | | * | | * | |
| 91 (KG DN 200) | 132 | 141 | Compakt | 4-023- 22399 | | * | | | |
| 200 | 88 | 103 | Compakt | 4-023- 22658 | | * | | _ | |
| 200 | 108 | 115 | Compakt | 4-024- 22340 | | 4-024- 22530 | | - | |
| 200 | 116 | 126 | Compakt | 4-024- 22341 | | 4-024- 22531 | | 4-024- 22351 | |
| 200 | 132 | 141 | Compakt | 4-024- 22342 | | 4-024- 22532 | | | |
| 200 200 | 135 150 | 144 160 | Compakt | 4-023- 22384 4-023- 22652 | | * | | - | |
| | | | Compakt | | | * | | | |
| 250 250 | 135 150 | 144 159 | Compakt Compakt | 4-023- 22464 4-023- 22465 | | * | | - | |
| 250 | 150 | 162 | Compakt | 4-023- 22405 | | * 4-024- 22533 | | - | |
| 250 | 168 | 181 | Compakt | 4-024- 22343 | | 4-024- 22534 | | | |
| 250 | 178 | 187 | Compakt | 4-023- 22386 | | * | | * | |
| 250 | 197 | 202 | Compakt | 4-023- 22653 | | * | | | |
| 250 | 204 | 210 | Compakt | 4-023- 22654 | | * | | | |
| 300 | 178 | 187 | Compakt | 4-023- 22466 | | * | | | |
| 300 | 193 | 204 | Compakt | 4-024- 22345 | | 4-024- 22535 | | * | |
| 300 | 218 | 226 | Compakt | 4-024- 22346 | | 4-024- 22536 | | | |
| 350 | 224 | 233 | Compakt | 4-023- 22468 | | * | | | |
| 350 | 249 | 258 | Compakt | 4-023- 22469 | | * | | * | |
| 350 | 270 | 282 | Compakt | 4-023- 22655 | | * | | | |
| 400 | 270 | 280 | Compakt | 4-023- 22477 | | 4-023- 22478 | | - | |
| 400 400 | 279 | 288 | Compakt | 4-023- 22470 | | * | | - | |
| 400 | 304 | 313 | Compakt | 4-023- 22471 | | * | | * | |
| 400 | 314 | 323 | Compakt | 4-023- 22472 | | * | | | |

*Available on request/customised compakt seal up to 2200 mm OD.

PSI Compakt-Seals for PIPE Selection Guide



| Please copy the order sheet and fax to PSI Ltd Fax +44 (0) 1480 404662 | | | | | | | |
|--|------|---------------|-------------|---|----------------|---|----------------|
| Core drilled hole e.g. wall sleeve | | er pipe mm | Description | V2/ pressur bolts rubber thick | e plate V2A | V2/ pressur bolts rubber thickne | e plate V2A |
| mm | min. | max. | | Part no. | pcs. | Part no. | pcs. |
| 125 | 70 | 78 | Compakt | 4-024- 22337 | | 4-023- 22387 | |
| 150 | 69 | 78 | Compakt | 4-023- 22463 | | 4-023- 22485 | |
| 150 | 85 | 94 | Compakt | 4-023- 22382 | | 4-023- 22388 | |
| 200 | 108 | 115 | Compakt | 4-024- 22340 | | 4-023- 22389 | |
| 200 | 119 | 128 | Compakt | 4-023- 22383 | | 4-023- 22390 | |
| 200 | 135 | 144 | Compakt | 4-023- 22384 | | 4-023- 22391 | |
| 250 | 135 | 144 | Compakt | 4-023- 22464 | | 4-023- 22486 | |
| 250 | 150 | 159 | Compakt | 4-023- 22465 | | 4-023- 22487 | |
| 250 | 156 | 165 | Compakt | 4-023- 22385 | | 4-023- 22392 | |
| 250 | 168 | 181 | Compakt | 4-024- 22344 | | 4-023- 22488 | |
| 250 | 178 | 187 | Compakt | 4-023- 22386 | | 4-023- 22393 | |
| 300 | 178 | 187 | Compakt | 4-023- 22466 | | 4-023- 22489 | |
| 300 | 198 | 207 | Compakt | 4-023- 22467 | | 4-023- 22490 | |
| 350 | 224 | 233 | Compakt | 4-023- 22468 | | 4-023- 22491 | |
| 350 | 249 | 258 | Compakt | 4-023- 22469 | | 4-023- 22492 | |
| 400 | 279 | 288 | Compakt | 4-023- 22470 | | 4-023- 22493 | |
| 400 | 304 | 313 | Compakt | 4-023- 22471 | | 4-023- 22494 | |
| 400 | 314 | 323 | Compakt | 4-023- 22472 | | 4-023- 22495 | |

| De | scription | pcs. | Ø I.D. or wall sleeve | Ø O.D. in mm | Part no. |
|------|--|------|-----------------------|-----------------|----------------------|
| | Rubber ring | | DN 70 | 18-32 | 4-012- 22800 |
| | | | DN 80 | 30-40 | 4-012- 22801 |
| | | | DN 80 | 42-50 | 4-012- 22802 |
| | | | DN 90 | 32-42 | 4-012- 22803 |
| | | | DN 90 | 42-54 | 4-012- 22809 |
| | | | DN 100 | 8-20 | 4-012- 22804 |
| | | | DN 100 | 25-40 | 4-012- 22805 |
| | | | DN 100 | 40-56 | 4-012- 22806 |
| | | | DN 100 | 56-66 | 4-012- 22807 |
| | | | DN 120 | 60-75 | 4-012- 22808 |
| | Guide for M6 and M8 | | DN 50 TO 200 | | 4-023- 22650 |
| A La | KB-Epoxy resin conservation set for core drilled holes | | | | 4-015- S22005 |

despatched by:

date/signature

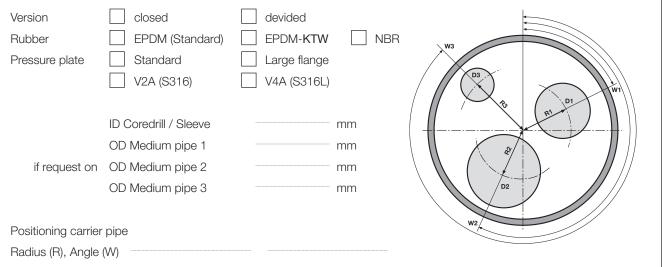
PSI Compakt-Seals Selection Guide



Compact KTW- and Special types

If the carrier pipe is not centred or if you want to seal several carrier pipes or cables in the same wall opening, please fill in the form below or give us a detailed drawing showing all dimensions.

The pressure plates for the special versions will be in stainless steel V2A.



If you need further information - please contact us. We will be pleased to help you.

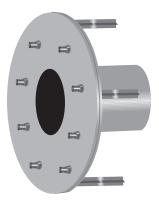
PSI Compakt-Seals



Wall sleeves with fixed/loose flange

Complying with DIN 18195, Part 9 for constructions with sealing strips including rubber inlays between flanges.





Seals with fixed/loose flange

Complying with DIN 18195, Part 9 for constructions with sealing strips including rubber inlays between flanges, and fastening materials.



Further sizes and types in stainless steel upon request

Wall sleeves for non-pressing water: all steel components made of V2A

| OD Pipe | ID Sleeve | OD fixed flange | Length of wall sleeve |
|---------|-----------|-----------------|-----------------------|
| 20-40 | 80 | 224 | |
| 20-65 | 100 | 244 | |
| 55-78 | 125 | 269 | |
| 69-110 | 150 | 294 | |
| 108-144 | 200 | 344 | |
| 135-187 | 250 | 396 | 200 |
| 178-226 | 300 | 446 | 250 |
| 224-296 | 350 | 496 | 300 |
| 279-330 | 400 | 548 | |
| 300-400 | 500 | 648 | 350 |
| 400-500 | 600 | 748 | 400 |
| 500-600 | 700 | 848 | 500 |
| 600-700 | 800 | 948 | |
| 700-800 | 900 | 1050 | |
| 800-900 | 1000 | 1150 | |

Wall sleeves for pressing water, all steel components made of V2A

| OD Pipe | ID Sleeve | OD fixed flange | Length of wall sleeve |
|---------|-----------|-----------------|-----------------------|
| 20-40 | 80 | 404 | |
| 20-65 | 100 | 424 | |
| 55-78 | 125 | 449 | |
| 69-110 | 150 | 474 | |
| 108-144 | 200 | 524 | |
| 135-187 | 250 | 576 | 200 |
| 178-226 | 300 | 626 | 250 |
| 224-296 | 350 | 676 | 300 |
| 279-330 | 400 | 728 | |
| 300-400 | 500 | 828 | 350 |
| 400-500 | 600 | 928 | 400 |
| 500-600 | 700 | 1028 | 500 |
| 600-700 | 800 | 1128 | 000 |
| 700-800 | 900 | 1230 | |
| 800-900 | 1000 | 1330 | |

Seals against non-pressing water, all steel components made of V2A

| OD Pipe | Core drill / ID wall sleeve | OD fixed flange |
|---------|--------------------------------|-----------------|
| 20-40 | 80 | 220 |
| 20-65 | 100 | 240 |
| 55-78 | 125 | 265 |
| 69-110 | 150 | 290 |
| 108-144 | 200 | 340 |
| 135-187 | 250 | 390 |
| 178-226 | 300 | 440 |
| 224-296 | 350 | 490 |
| 279-330 | 400 | 540 |
| 300-400 | 500 | 640 |
| 400-500 | 600 | 740 |
| 500-600 | 700 | 840 |
| 600-700 | 800 | 940 |
| 700-800 | 900 | 1040 |
| 800-900 | 1000 | 1140 |

PSI Compakt-Seals Technical Data



Seals with fixed/loose flange

Complying with DIN 18195, Part 9 for constructions with sealing strips



Seals against pressing water, all steel components made of V2A

| O/D Pipe | O/D Sealing | O/D Loose Flange |
|----------|-------------|------------------|
| 20-40 | 80 | 400 |
| 20-65 | 100 | 420 |
| 55-78 | 125 | 445 |
| 69-110 | 150 | 470 |
| 108-144 | 200 | 520 |
| 135-187 | 250 | 570 |
| 178-226 | 300 | 620 |
| 224-296 | 350 | 670 |
| 279-330 | 400 | 720 |
| 300-400 | 500 | 820 |
| 400-500 | 600 | 920 |
| 500-600 | 700 | 1020 |
| 600-700 | 800 | 1120 |
| 700-800 | 900 | 1220 |
| 800-900 | 1000 | 1320 |

On wall-face sleeve in one-piece and multi-part versions all steel components made of V2A. For installation in front of a wall or beneath a ceiling, including sealing compound for the wall and fastening materials.

| OD Pipe | ID sleeve | Fixed flange edge length | Length of sealing collar |
|---------|-----------|-----------------------------|--------------------------|
| 20-40 | 80 | 280 | |
| 20-65 | 100 | 300 | |
| 55-78 | 125 | 325 | |
| 69-110 | 150 | 350 | |
| 108-144 | 200 | 400 | |
| 135-187 | 250 | 450 | 60 mm |
| 178-226 | 300 | 500 | |
| 224-296 | 350 | 550 | |
| 279-330 | 400 | 600 | |
| 300-400 | 500 | 700 | |
| 400-500 | 600 | 800 | |
| 500-600 | 700 | 900 | |
| 600-700 | 800 | 1000 | |
| 700-800 | 900 | 1100 | 100 mm |
| 800-900 | 1000 | 1200 | |

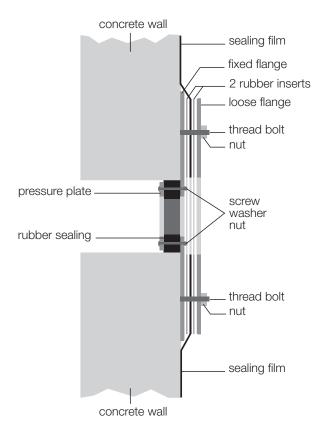
Further sizes and types in stainless steel upon request

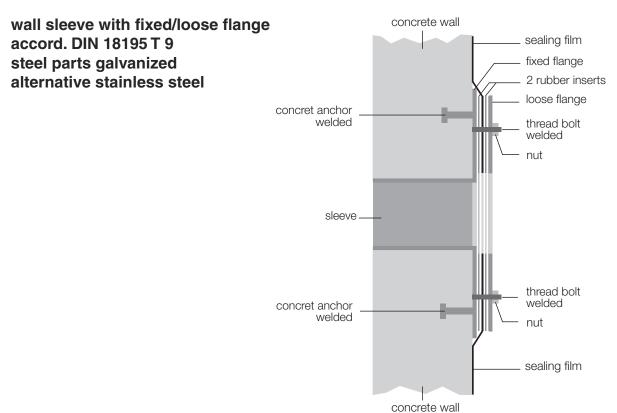


PSI Compakt-Seals Sectional View



sealing with fixed/loose flange accord. DIN 18195 T 9 steel parts galvanized alternative stainless steel





PSI Compakt-Seals



Each sealing consists of one rubber element, 2 pressure plates and the corresponding number of bolts and nuts.

Clean the wall sleeve, core drilled hole, carrier pipe or cable. We recommend to coat core drill with epoxy resign.

Push the PSI COMPAKT into the sleeve or core drilled hole and push the carrier pipe through. If the carrier pipe is already installed please use our divided version

Start to tighten the nuts clock wise with a torque wrench. Giving each nut 2-3 turns. Repeat procedure after two hours.

Note:

Make sure that you have access to the nuts for eventual re-tightening.

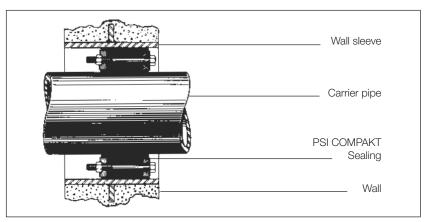
| max. torque moment | bolts |
|-----------------------|-------|
| 5 Nm | M6 |
| 10 Nm | M8 |
| 15 Nm | M10 |
| 20 Nm | M12 |











PSI Compakt Varia 1.5 Installation Instruction



To peel off the onion rings push the rings backwards and cut with a sharp knife. Pull off the ring by hand.





Push out the centre plug



Push the onion rings



with a screw driver backwards



Slightly cut the remainding rubber



and pull away the onion ring

Example:

For a carrier pipe O.D. 32 mm take off the centre and three additional onion rings of 5 mm. The new opening of 35 mm I.D. is now suitable for your carrier pipe of 32 mm O.D.

PSI Compakt systems Wall penetration systems





Compakt Type "FW" 2x40 for preinsulated pipe



Compakt multiple open available



Compakt Varia 1.5 onion rings



Compakt blind







Kombi C.P. for cables



Wallsleeves in Steel, Cement or PVC



Sealing plug metal free



On wall-face sleeve, split and closed version



Seals with fix/loose flange in accordence with DIN 18195 T9



LinkSeal



Stopaq Sealing Compound



Compakt-Special

Disclaimer

Please note, failure to select the correct materials or products we supply ("the Products") may result in damage to plant, equipment or property. In some instances, it may cause death or personal injury. We are not designers and do not give advice about design related matters concerning the Products. We can help and assist with the technical specifications for the Products. In specific applications, particularly where critical conditions exist, we will try to assist you within the limitations of the services that we offer. All information supplied by us is intended as technical co-operation outlining the specifications of the different Products which we supply. To the extent permitted in law, no warranty is given in respect of any information supplied by us. The customer must satisfy themselves as to the suitability of the Products for their intended application and use. The correct fitting of Products is the responsibility of the customer. Your statutory rights remain unaffected. Save in respect of death, personal injury or fraud, our entire liability to you, however arising from the supply of Products shall be limited to the £10M indemnity amount provided by our insurers.