

Designed to perform,  
engineered to last



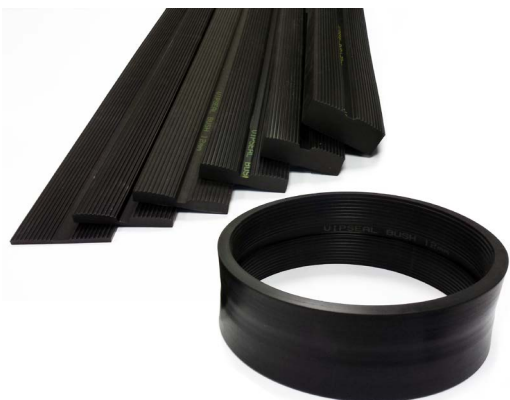
## Fabricated & Moulded Bushes (VBC)

When pipe diameters differ significantly, a VIPSeal® bush can be just the answer you need.



Designed to be used with VIPSeal® Standard, Large and Extra Wide Couplings, a bush is an elastomeric sleeve of varying thickness which allows you to connect pipes of significantly varying outside diameters.

VIPSeal® bushes are engineered from the same high quality elastomeric rubber as our seals. The majority of bushes are fabricated individually to meet the specific site requirement however a number of moulded bushes are available for use with specific standard couplings. Fabricated bushes are available in six different thicknesses. Outside dimensions should be specified at time of ordering.



### Product Specifications

|                                    |   |
|------------------------------------|---|
| VIPSeal® Product Reference         | VBC / VBCM  |
| Size Range                         | 50mm and above  |
| Material                           | EPDM Rubber   |
| Constant Working Temperature Range | -10° to 60°   |
| Standards                          | EN681-1, EN295-4*, DIBt**, MPA, VA***<br>* nominal sizes > DN100-1000<br>** nominal sizes > DN100-1499<br>*** nominal sizes > DN100-600 |

UK UK  
CANI



BS EN 295 BS EN 681-1 WIS 4-41-01



Deutsches  
Institut  
für  
Bautechnik



MPA NRW.



### Applications:

- Used when the outside diameters of pipes are significantly different
- To be used when the application is required to conform to the WIS standard
- Available in a variety of thicknesses

### Benefits:

- ✓ Manufactured from high grade materials ensuring high performance and long service life
- ✓ Manufactured to suit specific differences in pipe outside diameters
- ✓ Conforms to WIS 4-41-01 when used in conjunction with a VIPSeal® Standard Coupling
- ✓ Can be used where there is an increase or reduction in pipe size



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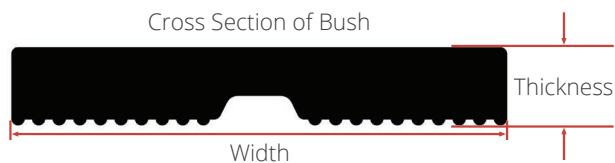
## Product Range

### Fabricated Bushes

| VIPSeal Reference | Range (Pipe O/D) |         | Width (mm) | Thickness (mm) |
|-------------------|------------------|---------|------------|----------------|
|                   | From (mm)        | To (mm) |            |                |
| VBC0400           | 50               | 99      | 85mm       | 4              |
| VBC0401           | 100              | 199     | 85mm       | 4              |
| VBC0402           | 200              | 299     | 85mm       | 4              |
| VBC0403           | 300              | 399     | 85mm       | 4              |
| VBC0404           | 400              | 499     | 85mm       | 4              |
| VBC0405           | 500              | 599     | 85mm       | 4              |
| VBC0406           | 600              | 699     | 85mm       | 4              |
| VBC0407           | 700              | 799     | 85mm       | 4              |
| VBC0408           | 800              | 899     | 85mm       | 4              |
| VBC0409           | 900              | 999     | 85mm       | 4              |
| VBC0410           | 1000             | 1099    | 85mm       | 4              |
| VBC0411           | 1100             | 1199    | 85mm       | 4              |
| VBC0412           | 1200             | 1299    | 85mm       | 4              |
| VBC0413           | 1300             | 1399    | 85mm       | 4              |
| VBC0414           | 1400             | 1499    | 85mm       | 4              |
| VBC0800           | 50               | 99      | 85mm       | 8              |
| VBC0801           | 100              | 199     | 85mm       | 8              |
| VBC0802           | 200              | 299     | 85mm       | 8              |
| VBC0803           | 300              | 399     | 85mm       | 8              |
| VBC0804           | 400              | 499     | 85mm       | 8              |
| VBC0805           | 500              | 599     | 85mm       | 8              |
| VBC0806           | 600              | 699     | 85mm       | 8              |
| VBC0807           | 700              | 799     | 85mm       | 8              |
| VBC0808           | 800              | 899     | 85mm       | 8              |
| VBC0809           | 900              | 999     | 85mm       | 8              |
| VBC0810           | 1000             | 1099    | 85mm       | 8              |
| VBC0811           | 1100             | 1199    | 85mm       | 8              |
| VBC0812           | 1200             | 1299    | 85mm       | 8              |
| VBC0813           | 1300             | 1399    | 85mm       | 8              |
| VBC0814           | 1400             | 1499    | 85mm       | 8              |
| VBC1202           | 200              | 299     | 85mm       | 12             |
| VBC1203           | 300              | 399     | 85mm       | 12             |
| VBC1204           | 400              | 499     | 85mm       | 12             |
| VBC1205           | 500              | 599     | 85mm       | 12             |
| VBC1206           | 600              | 699     | 85mm       | 12             |
| VBC1207           | 700              | 799     | 85mm       | 12             |
| VBC1208           | 800              | 899     | 85mm       | 12             |
| VBC1209           | 900              | 999     | 85mm       | 12             |
| VBC1210           | 1000             | 1099    | 85mm       | 12             |
| VBC1211           | 1100             | 1199    | 85mm       | 12             |
| VBC1212           | 1200             | 1299    | 85mm       | 12             |
| VBC1213           | 1300             | 1399    | 85mm       | 12             |
| VBC1214           | 1400             | 1499    | 85mm       | 12             |

| VIPSeal Reference | Range (Pipe O/D) |         | Width (mm) | Thickness (mm) |
|-------------------|------------------|---------|------------|----------------|
|                   | From (mm)        | To (mm) |            |                |
| VBC1602           | 200              | 299     | 85mm       | 16             |
| VBC1603           | 300              | 399     | 85mm       | 16             |
| VBC1604           | 400              | 499     | 85mm       | 16             |
| VBC1605           | 500              | 599     | 85mm       | 16             |
| VBC1606           | 600              | 699     | 85mm       | 16             |
| VBC1607           | 700              | 799     | 85mm       | 16             |
| VBC1608           | 800              | 899     | 85mm       | 16             |
| VBC1609           | 900              | 999     | 85mm       | 16             |
| VBC1610           | 1000             | 1099    | 85mm       | 16             |
| VBC1611           | 1100             | 1199    | 85mm       | 16             |
| VBC1612           | 1200             | 1299    | 85mm       | 16             |
| VBC1613           | 1300             | 1399    | 85mm       | 16             |
| VBC1614           | 1400             | 1499    | 85mm       | 16             |
| VBC2402           | 200              | 299     | 85mm       | 24             |
| VBC2403           | 300              | 399     | 85mm       | 24             |
| VBC2404           | 400              | 499     | 85mm       | 24             |
| VBC2405           | 500              | 599     | 85mm       | 24             |
| VBC2406           | 600              | 699     | 85mm       | 24             |
| VBC2407           | 700              | 799     | 85mm       | 24             |
| VBC2408           | 800              | 899     | 85mm       | 24             |
| VBC2409           | 900              | 999     | 85mm       | 24             |
| VBC2410           | 1000             | 1099    | 85mm       | 24             |
| VBC2411           | 1100             | 1199    | 85mm       | 24             |
| VBC2412           | 1200             | 1299    | 85mm       | 24             |
| VBC2413           | 1300             | 1399    | 85mm       | 24             |
| VBC2414           | 1400             | 1499    | 85mm       | 24             |
| VBC3202           | 200              | 299     | 85mm       | 32             |
| VBC3203           | 300              | 399     | 85mm       | 32             |
| VBC3204           | 400              | 499     | 85mm       | 32             |
| VBC3205           | 500              | 599     | 85mm       | 32             |
| VBC3206           | 600              | 699     | 85mm       | 32             |
| VBC3207           | 700              | 799     | 85mm       | 32             |
| VBC3208           | 800              | 899     | 85mm       | 32             |
| VBC3209           | 900              | 999     | 85mm       | 32             |
| VBC3210           | 1000             | 1099    | 85mm       | 32             |
| VBC3211           | 1100             | 1199    | 85mm       | 32             |
| VBC3212           | 1200             | 1299    | 85mm       | 32             |
| VBC3213           | 1300             | 1399    | 85mm       | 32             |
| VBC3214           | 1400             | 1499    | 85mm       | 32             |

Cross Section of Bush



### Moulded Bushes

| VIPSeal Reference | Suitable for | Range (Pipe O/D) |         | Width (mm) | Thickness (mm) |
|-------------------|--------------|------------------|---------|------------|----------------|
|                   |              | From (mm)        | To (mm) |            |                |
| VBCM08/160        | VSC180       | 160              | 176     | 60         | 8              |
| VBCM08/180        | VSC200       | 180              | 196     | 75         | 8              |
| VBCM08/250        | VSC275       | 250              | 266     | 75         | 8              |
| VBCM08/265        | VSC290       | 264              | 280     | 75         | 8              |
| VBCM16/164        | VSC200       | 164              | 196     | 75         | 16             |
| VBCM16/250        | VSC290       | 250              | 282     | 75         | 16             |

**Note:** The size range for fabricated bushes is an indication of size for pricing purposes only (it is not a pipe OD range that each individual bush will fit) as each bush is made bespoke to order.

Pipe OD will be required at the time of order and each bush will be manufactured accordingly.

Edition 1.0



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## Installation

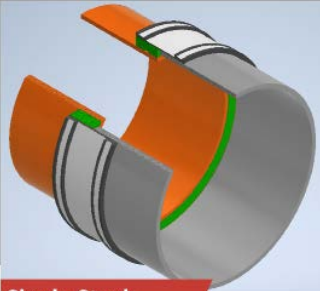
### Bushes

#### Standard coupling using a bush

1. Measure the coupling width and mark both pipes to be connected, half of the total width.
2. Slide the bush over the end of the smaller pipe up to the marked point, loosen the clamps on the coupling and place over the larger pipe.
3. Butt pipes together and slide over the coupling until the ends are level (lubricant not required).
4. Tighten central shear band and the tension bands to recommended torque.
5. After assembly of joint carefully tamp bedding under the pipeline.

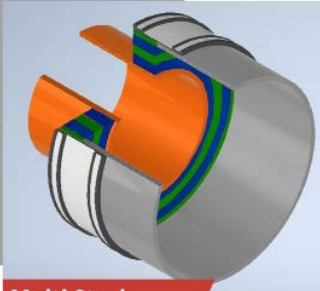


### VSC / VLC



Single Stack

BUSH  
1



Multi Stack

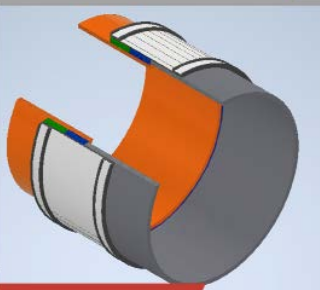
BUSH  
1  
BUSH  
2  
BUSH  
3  
BUSH  
4

Single stack and Multistack variation, when used on any VSC / VLC Coupling.

Multistack variation used in applications where the OD difference between the two pipes exceeds 32mm - bushes of varying thickness can be stacked to increase the overall thickness.

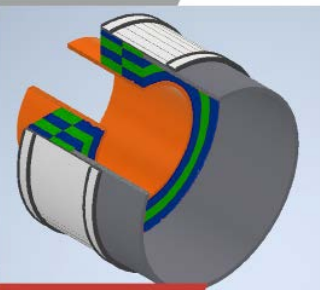
Bushes are available in 4/8/12/16/24 & 32mm thickness - multiple sizes can be stacked together to achieve the correct fitment.

### VSCW / VLCW



Single Stack

BUSH  
1 BUSH  
2



Multi Stack

BUSH BUSH  
1 2  
BUSH BUSH  
3 4  
BUSH BUSH  
5 6  
BUSH BUSH  
7 8

Single stack and Multistack variation, when used on any VSCW / VLCW Coupling.

NB. Additional bushes are needed with wide coupling applications. These additional bushes sit next to each other to allow for the wide coupling to complete the seal.

Multistack variation used in applications where the OD difference between the two pipes exceeds 32mm - bushes of varying thickness can be stacked to increase the overall thickness.

Bushes are available in 4/8/12/16/24 & 32mm thickness - multiple sizes



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## Material Options

For applications which are subjected to higher temperatures, or where chemicals are present, VIPSeal® Flexible Couplings can be ordered in a range of materials:

### Heavy Duty Tension and Shear Bands

For higher corrosion or contaminated ground areas and marine environments, grade 1.4401(316) stainless steel should be specified to eliminate the need for protective tape.

### Rubber Sleeves

For applications where chemicals or higher continuous temperatures are experienced, VIPSeal® Flexible Couplings can be ordered in the following materials (contact our customer service team for technical guidance).



VIPSealPlus is manufactured from peroxide cured EPDM which is superior to the sulphur cured variant for elevated temperature applications and for applications that have to endure steam. Peroxide cured EPDM is recommended as continuous temperatures rise above 60°C for many years of leak free service is assured up to temperatures of 125°C. Peroxide cured EPDM has the same chemical compatibility as the standard VIPSeal range (sulphur cured EPDM).



VIPSealXtra is manufactured from sulphur cured Nitrile which is an effective material for applications that are exposed to mineral oils, fats and greases when constant temperatures remain below 60°C.



VIPSealXtraPlus is manufactured from peroxide cured Nitrile which is superior to the sulphur cured variant for elevated temperature applications. Peroxide cured Nitrile as continuous temperatures rise above 60°C for many years of leak free service is assured up to temperatures of 100°C.



VIPSealChem is manufactured from FKM which can cope with elevated continuous temperature applications up to 200°C. It's resistance to a wide range of chemicals makes it the perfect choice for industrial and food applications.



VIPSealXtreme is manufactured from FFKM and is suitable for applications found in chemical and process industries. With a resistance to aggressive chemicals and CWT exceeding 200°C, VIPSealXtreme is designed for the toughest conditions.

Information contained in this data sheet is up-to-date and correct as at the date of issue. We reserve the right to change any information without prior notice.

