

NAYLOR
BAND-SEAL

DUREY CASTINGS LTD
HAWLEY ROAD
DARTFORD
KENT DA1 1PU

Band-Seal Couplings



Flexible Couplings

for the repair of
and connections into
existing pipelines

email: sales@dureycastings.co.uk



Introduction

Naylor, a manufacturer of building materials since 1890, has a wealth of experience in manufacturing techniques with a reputation for service, in-depth ranges, quality products and value for money.

Band-Seal is a range of versatile, flexible couplings used for jointing pipes of both similar and different materials and sizes. The couplings are especially suitable for drains, sewers and underground pipelines. The extensive range connects pipes from 24mm to over 2000mm nominal size (DN), to other pipes of the same or different sizes and material.

The Band-Seal range of couplings consists of moulded synthetic elastomeric sleeves and stainless steel clamping bands. Standard Couplings also include a stainless steel shear band. A wide range of Bushes, Tools and End Caps complete the range.

Band-Seal Couplings are manufactured to exacting standards and are used and specified extensively by Water Companies and Local Authorities throughout the UK as well as being distributed worldwide.

Ordering Details

Obtain the sizes and materials of the pipes/junctions to be jointed. It is preferred that precise outside diameters are confirmed for each pipe, preferably by direct measurement on site. Reference to inside diameters and pipe material will not normally be sufficient to identify outside diameters. The pipe table (page 14) provides guidance on the outside diameter of the more common types and sizes of pipes but is not a substitute for pipe measurement on site. For pipes up to DN300, reference can also be made to the lists of typical connections.

All couplings and bushes over 600mm diameter are manufactured to suit specific site requirements therefore measurement of the outside diameters of the pipes to be joined is essential. It is recommended to take into consideration possible restrictions on site as the use of Band-Seal will require access to both sides of the pipe. For this reason it may be advisable to order a slightly larger Band-Seal Coupling for ease of installation.

Order the components using the Coupling Reference and

the Bush Reference (where required) from

Durey Castings Limited 01322 272424

or

Durey Castings South Coast 01323 441110

Availability

Naylor maintains comprehensive stocks of all types of Band-Seal Couplings and Bushes at Cawthorne, South Yorkshire, for England and Wales and Methil, Fife, for Scotland and Ireland.

The most popular sizes and types of coupling are readily available for Depots, Builders' Merchants or specialist Band-Seal Stockists throughout Britain.

Couplings and Bushes, which are specially manufactured to suit specific site requirements, are usually produced and supplied direct from either Cawthorne or Methil within 24 hours.

**24 Hour
Emergency
Hotline
0808 1780 161**

Delivery - A New and Improved Specials Service

A 'Next Day' delivery service is available including before noon and before 10.30am options using overnight carrier services from our main factory at Cawthorne for England and Wales and from Methil for Scotland and Ireland. For emergency repairs we can also offer a 'Same Day' service throughout the UK.



The Naylor Band-Seal Range

Standard Couplings



These couplings comply with the requirements of WIS 4-41-01 and are specifically designed for jointing pipes in sewerage, drainage and similar non-pressure applications where resistance to shear loads is required.

- On public sewers where couplings complying with WIS 4-41-01 are specified
- Repair and maintenance of existing pipelines
- Connections between pipes of different materials or sizes (Bushes may be required in these circumstances)
- Making connections by the insertion of new junctions into an existing pipeline
- Reconnection of laterals on renovated sewers
- Introducing rocker or hinge pipes outside manholes or structures
- Jointing short or cut lengths of pipe

Coupling Ref.	Min OD (mm)	Max OD (mm)	Width (mm)	Box Qty
NSC 115	100	115	120	20
NSC 121	105	121	120	20
NSC 125	110	125	120	20
NSC 137	120	137	120	20
NSC 142	125	142	120	12
NSC 150	130	150	150	12
NSC 165	140	165	150	12
NSC 175	150	175	150	10
NSC 182	160	182	150	10
NSC 200	175	200	150	10
NSC 215	190	215	150	8
NSC 225	200	225	150	6
NSC 250	225	250	150	6
NSC 275	250	275	150	6
NSC 290	265	290	150	5
NSC 310	285	310	190	3
NSC 320	300	320	190	3
NSC 335	305	335	190	3
NSC 345	315	345	190	4
NSC 365	340	365	190	4
NSC 385	355	385	190	4
NSC 412	385	412	190	2
NSC 425	400	425	190	2
NSC 430	405	430	190	2
NSC 445	420	445	190	2
NSC 465	435	465	190	2
NSC 475	445	475	190	2
NSC 495	465	495	190	2
NSC 510	480	510	190	2
NSC 525	495	525	190	2
NSC 540	510	540	190	2
NSC 550	520	550	190	2
NSC 560	530	560	190	2
NSC 580	555	580	190	2
NSC 600	570	600	190	2
NSC 620	590	620	190	2

316 Stainless Steel bands are available on all of the above

Large Standard Couplings

As the items are made to order to suit specific site requirements: please specify dimensions required when ordering.

Note: The size range is an indication of size for pricing purposes only. Couplings are manufactured to meet customer requirements. Please consider that the size you request will be the maximum size that the coupling will be manufactured to. For ease of installation you may require a slightly larger size.

Coupling Ref.	Min OD (mm)	Max OD (mm)	Width (mm)	Box Qty
NSC 601	601	699	190	N/A
NSC 700	700	799	190	N/A
NSC 800	800	899	190	N/A
NSC 900	900	999	190	N/A
NSC 1000	1000	1099	190	N/A
NSC 1100	1100	1199	190	N/A
NSC 1200	1200	1299	190	N/A
NSC 1300	1300	1399	190	N/A
NSC 1400	1400	1499	190	N/A
NSC 1500	1500	1599	190	N/A
NSC 1600	1600	1699	190	N/A
NSC 1700	1700	1799	190	N/A
NSC 1800	1800	1899	190	N/A
NSC 1900	1900	1999	190	N/A
NSC 2000	2000	3000	190	N/A
NSC 3000	3000	4000	190	N/A

316 Stainless Steel bands are available on all of the above

Extra Wide Couplings



Naylor Extra Wide Couplings are used predominantly for jointing pipes with a diameter greater than 1000mm but they are available to suit pipes with an outside diameter of 200mm upwards.

Naylor Extra Wide Couplings have a width of 300mm which allows a greater tolerance when cutting larger diameter pipes. The increased width also accommodates the greater movement of the joints associated with the depths at which these large diameter pipes are laid.

Note: The size range is an indication for pricing purposes only. Couplings are manufactured to meet customer requirements.

Coupling Ref.	Min OD (mm)	Max OD (mm)	Width (mm)	Box Qty
NWC 601	601	699	300	N/A
NWC 700	700	799	300	N/A
NWC 800	800	899	300	N/A
NWC 900	900	999	300	N/A
NWC 1000	1000	1099	300	N/A
NWC 1100	1100	1199	300	N/A
NWC 1200	1200	1299	300	N/A
NWC 1300	1300	1399	300	N/A
NWC 1400	1400	1499	300	N/A
NWC 1500	1500	1599	300	N/A
NWC 1600	1600	1699	300	N/A
NWC 1700	1700	1799	300	N/A
NWC 1800	1800	1899	300	N/A
NWC 1900	1900	1999	300	N/A
NWC 2000	2000	3000	300	N/A
NWC 3000	3000	4000	300	N/A

316 Stainless Steel bands are available on all of the above

Note: For sizes 200-600mm diameter please contact our Sales Department

Typical Connections - Standard Couplings

**NSC
121**

110mm PVCu
100mm Cast Iron (BS416)
100mm Stainless Steel
100mm Cast Iron (BS437)
100mm Ductile Iron
100mm Supersleve (See also NSC 137)

**NSC
137**

100mm (4") Salt Glazed Ware
100mm Vitrified Clay
100mm Densleeve
100mm Supersleve
100mm Pitch Fibre
100mm Asbestos Cement

**NSC
165**

160mm PVCu
150mm Cast Iron (smu/ensign/sml)
150mm Stainless Steel
160mm Polyethelene

**NSC
175**

160mm PVCu
150mm Ductile Iron
150mm Cast Iron (BS416)
150mm Cast Iron (BS437)
150mm Stainless Steel
150mm Ultra-Rib
150mm Quantum

**NSC
200**

150mm (6") Salt Glazed Ware
150mm Vitrified Clay
150mm Densleeve
150mm Supersleve
150mm Concrete
150mm Asbestos Cement
150mm Pitch Fibre
150mm Ultra-rib
200mm PVC-u

**NSC
250**

175mm Pitch Fibre
200mm Vitrified Clay
200mm Asbestos Cement
225mm Ultra-Rib
225mm Quantum
250mm PVCu

**NSC
275**

250mm Ductile Iron
250mm Cast Iron

**NSC
290**

225mm (9") Salt Glazed Ware
225mm Vitrified Clay
225mm Densleeve
225mm Supersleve
225mm Concrete (OD Up To 290)
250mm Asbestos Cement
250mm Ductile Iron

**NSC
345**

300mm Asbestos Cement
300mm Ultra-Rib
300mm Quantum
300mm Ductile Iron

**NSC
385**

300mm (12") Salt Glazed Ware
300mm Vitrified Clay
300mm Densleeve
300mm Supersleve
300mm Concrete (OD Up To 385)

**NSC
465**

375mm (15") Salt Glazed Ware
375mm Vitrified Clay
375mm Concrete (OD up to 445mm)
400mm Asbestos Cement
450mm PVCu

**NSC
560**

450mm (18") Salt Glazed Ware
450mm Vitrified Clay
450mm Concrete (OD up to 560mm)
500mm Asbestos Cement

Bushes



Manufactured from synthetic elastomers and available in a variety of sizes and thicknesses to allow the Standard range of couplings to connect pipes which may have a considerable difference in their outside diameters.

They are used where the difference in the outside diameter of the pipes to be jointed exceeds 12mm and an Adaptor Coupling is not available.

Generally used singularly but multiple bush sets may be used.

Available in diameters up to 2000mm and in four thicknesses 8mm, 16mm, 24mm and 32mm.

Note 1: The size range is an indication of size for pricing purposes only. Bushes are manufactured to meet specific customer requirements.

Note 2: For bushes over 1000mm diameter please contact our Sales Department.

8 ▼	Bush Ref.	OD Between (mm)
	BC 0801	170-199
	BC 0802	200-299
	BC 0803	300-399
	BC 0804	400-499
	BC 0805	500-599
	BC 0806	600-699
	BC 0807	700-799
	BC 0808	800-899
	BC 0809	900-999
	BC 0810	1000-1099
	BC 0811	1100-1199
	BC 0812	1200-1299

16 ▼	Bush Ref.	OD Between (mm)
	BC 1601	190-199
	BC 1602	200-299
	BC 1603	300-399
	BC 1604	400-499
	BC 1605	500-599
	BC 1606	600-699
	BC 1607	700-799
	BC 1608	800-899
	BC 1609	900-999

24 ▼	Bush Ref.	OD Between (mm)
	BC 2402	250-299
	BC 2403	300-399
	BC 2404	400-499
	BC 2405	500-599
	BC 2406	600-699
	BC 2407	700-799
	BC 2408	800-899
	BC 2409	900-999

32 ▼	Bush Ref.	OD Between (mm)
	BC 3204	400-499
	BC 3205	500-599
	BC 3206	600-699
	BC 3207	700-799
	BC 3208	800-899
	BC 3209	900-999

Chemical Couplings



The range of Hathernware chemically resistant Band-Seal couplings offers the chemical and process industries the advantage of a modern, mechanical, flexible jointing system for any plain end pipe system, including Naylor's Hathernware "Thermachem" range of thermal shock and chemically resistant pipes.

Elastomeric Sleeve - Manufactured in EPDM or NITRILE conforming to BS EN681-1.

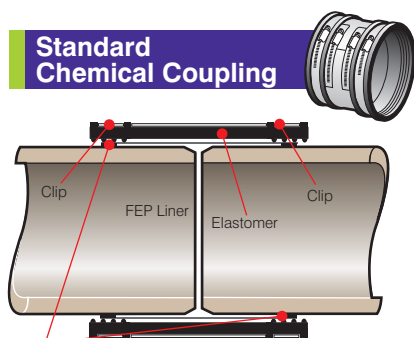
Shear Clamping Bands - Manufactured in corrosion Grade 1.4301 (304) resistant austenitic stainless steel to BS EN10088-2. Where external contamination demands a higher quality stainless, this can be supplied to order.

Fluoropolymer Liner - A one piece seamless FEP element located within the elastomeric sleeve. Expanded PTFE secondary seals ensure a leak tight joint between FEP and the pipe. For the best results and to ensure a close fit between the liner and pipe, the FEP liner is heat shrunk on site. The liner and seal are chemically inert and resistant to virtually all chemicals.

Standard Couplings - Used for jointing pipes of the same outside diameter

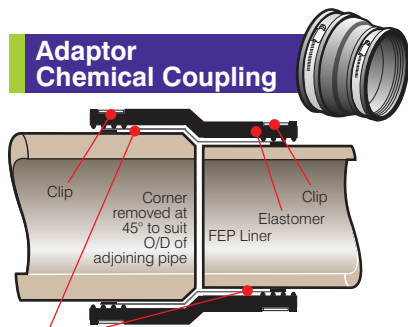
Adaptor Couplings - Available where pipes of different diameter require connecting.

Standard Chemical Coupling



1mm thick PTFE self adhesive backed tape positioned on pipes with slight overlap at joint. See heat shrink installation instructions.

Adaptor Chemical Coupling



1mm thick PTFE self adhesive backed tape positioned on pipes with slight overlap at joint. See heat shrink installation instructions.

Pipe Bore (mm)	Gap Between Pipe Ends (mm)
100 & 150	5
225 & 300	10
380 & 450	15
600 & above	20

Torque Setting

For all couplings 12Nm

Chemical Coupling - Installation Instructions

Ensure the correct size coupling is used to suit pipe or fitting size. Consult the Naylor Hathernware Technical Department on 01226 794074 for advice.

Pipes and Fittings

- All ends in the area of the coupling to be clean and free from grit or dirt.
- All cutting to be a single clean cut by a suitable disc cutter ensuring cut end has all burrs or snags ground off flat.
- All ends, whether site cut or not, to have sharp edges or corners removed and chamfered on the outer edge a minimum of 5mm x 45°. This is most important to avoid damage to the chemical resistant FEP liner.

Procedure

For couplings/adaptors with site fitted heat shrink sleeves:

- Place FEP sleeve and coupling onto 1st pipe.
- Align second pipe leaving appropriate gap. See table attached.
- Slide sleeve into position centrally over joint and mark sleeve ends onto pipe.
- Slide sleeve back onto 1st pipe.
- Place PTFE tape around pipe so self adhesive backing adheres to the pipe in such a position that the outer edge of the tape aligns with marks for outer edge of FEP sleeve. At the top of the pipe overlap the tape 5mm.
- Reposition sleeve over joint covering sealing tape.
- Apply hot air to shrink sleeve onto pipe face and PTFE tapes. (The hot air gun should be kept in motion at all times to avoid scorching the FEP liner). Work all around FEP liner to ensure whole area is tight down onto pipe face and PTFE tape either side of pipe gap.

- Position coupling/adaptor centrally over sleeve.
- Tighten all clamps equally working from the centre outwards in equal stages using 4" lever ratchet and socket or socket style screwdriver to specified torque.

For couplings fitted with pre-shrunk FEP liners incorporating expanded PTFE secondary seals.

- Slide coupling over 1st pipe taking care not to dislodge the PTFE seal.
- Align second pipe leaving a 5mm gap.
- Position coupling centrally across joint.
- Tighten all clamps equally working from the centre outwards in equal stages using 4" lever ratchet and socket or socket style screwdriver to specified torque.

Additional Protection

In ground where contaminants may degrade stainless steel or the elastomer, the following additional procedure shall apply.

- Two layers of Denso tape or similar shall be wound around the coupling to completely encase same and adjacent pipe area to avoid salts penetration to the coupling.
- In more severe conditions the coupling and adjacent pipe area shall be encased in a heat shrunk polyethylene sleeve or tape with hot melt glue adhesive backing as manufactured by Raychem.

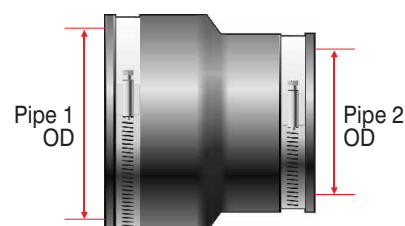
These protective materials shall be installed in accordance with their manufacturers instructions and shall entirely encase the coupling and 50mm minimum of adjacent pipe.

It is advantageous to place a small block of resilient material over the worm drives and threaded clip ends to avoid these projections from penetrating the protective layer.

Adaptor Couplings



Provide an inexpensive method of directly joining pipes of differing outside diameters, without the need to use bushes. The most common application is for connecting PVC-u pipes to a variety of other pipe materials including vitrified clay. These couplings are also suitable for connecting other types of pipes including cast iron and metal pipes (up to a maximum outside diameter of 420mm).



Universal Adaptors

Coupling Ref.	Pipe 1 OD (mm)	Pipe 2 OD (mm)	Width (mm)	Old Ref
NAC 4000	121/137 to 110/121		100	NAC 1212
NAC 6000	180/200 to 160/180		150	NAC 1804
NAC 9001	260/285 to 180/205		150	NAC 2601

Drainage Adaptors

Coupling Ref.	Pipe 1 OD (mm)	Pipe 2 OD (mm)	Width (mm)	Old Ref
NAC 1000	97/102 to 86/91		70	NAC 1000
NAC 1153	100/115 to 40/50		102	NAC 1001
NAC 1154	100/115 to 50/64		102	NAC 1002
NAC 1155	100/115 to 75/90		95	NAC 1003
NAC 1221	110/122 to 80/95		120	NAC 1101
NAC 1226	115/122 to 61/68		90	NAC 1004
NAC 5144	110/125 to 100/115		120	NAC 1102
NAC 1361	121/136 to 80/95		120	NAC 1211
NAC 1362	121/136 to 100/115		90	NAC 1213
NAC 1370	122/137 to 75/90		100	NAC 1221
NAC 1452	130/145 to 110/125		120	NAC 1302
NAC 1521	137/152 to 100/115		120	NAC 1371
NAC 1602	144/160 to 110/122		120	NAC 1442
NAC 1603	144/160 to 121/136		120	NAC 1443
NAC 1681	153/168 to 100/115		150	NAC 1531
NAC 1703	155/170 to 130/145		120	NAC 1553
NAC 1762	155/176 to 110/125		120	NAC 1552
NAC 1801	166/181 to 100/115		150	NAC 1661
NAC 1802	166/181 to 110/125		150	NAC 1662
NAC 1922	170/192 to 110/122		120	NAC 1704
NAC 1923	170/192 to 121/136		120	NAC 1705
NAC 1924	170/192 to 144/160		120	NAC 1706
NAC 1981	183/198 to 100/115		155	NAC 1831
NAC 1983	180/198 to 122/137		150	NAC 1801
NAC 2000	180/200 to 130/145		150	NAC 1800
NAC 2002	180/200 to 110/121		150	NAC 1802
NAC 2003	180/200 to 155/170		150	NAC 1803
NAC 2061	190/206 to 100/115		150	NAC 1901
NAC 2063	190/206 to 138/153		150	NAC 1903
NAC 2121	185/212 to 100/115		150	NAC 1852

316 Stainless Steel bands are available on all of the above

Drainage Adaptors (continued)

Coupling Ref.	Pipe 1 OD (mm)	Pipe 2 OD (mm)	Width (mm)	Old Ref
NAC 2154	190/215 to 150/165		150	NAC 1904
NAC 2164	185/216 to 160/180		150	NAC 1851
NAC 2254	200/225 to 160/175		150	NAC 2001
NAC 2352	210/235 to 110/122		150	NAC 2102
NAC 2353	210/235 to 121/136		150	NAC 2103
NAC 2354	210/235 to 144/160		150	NAC 2104
NAC 2355	210/235 to 170/192		150	NAC 2105
NAC 2356	210/235 to 190/215		150	NAC 2106
NAC 2654	240/265 to 144/160		150	NAC 2404
NAC 2655	240/265 to 170/192		155	NAC 2405
NAC 2656	240/265 to 190/215		150	NAC 2406
NAC 2657	240/265 to 210/235		155	NAC 2407
NAC 2756	250/275 to 200/225		165	NAC 2502
NAC 2855	260/285 to 240/265		150	NAC 2602
NAC 2904	265/290 to 144/160		150	NAC 2658
NAC 2907	265/290 to 210/235		150	NAC 2659
NAC 3167	301/316 to 259/274		165	NAC 3011
NAC 3204	295/320 to 144/160		165	NAC 2954
NAC 3205	295/320 to 170/192		150	NAC 2955
NAC 3207	295/320 to 210/235		150	NAC 2957
NAC 3208	295/320 to 240/265		150	NAC 2958
NAC 3209	295/320 to 265/290		150	NAC 2959
NAC 3351	310/335 to 180/205		160	NAC 3101
NAC 3600	335/360 to 295/320		165	NAC 3350
NAC 3608	335/360 to 240/265		165	NAC 3358
NAC 3609	335/360 to 265/290		165	NAC 3359
NAC 3763	360/376 to 323/337		165	NAC 3604
NAC 3850	360/385 to 300/325		165	NAC 3603
NAC 3858	360/385 to 240/265		165	NAC 3601
NAC 3859	360/385 to 265/290		165	NAC 3602
NAC 4208	395/420 to 240/265		165	NAC 3958
NAC 4209	395/420 to 265/290		165	NAC 3959

Adaptors for structural walled plastic pipes

Coupling Ref.	Pipe 1 OD (mm)	Pipe 2 OD (mm)	Width (mm)	Old Ref
NAR 1500	160/170 to 170/192		110	NACUR 150
NAR 2250	240/250 to 260/285		145	NACUR 225
NAR 3000	325/335 to 360/385		165	NACUR 300

316 Stainless Steel bands are available on all of the above

Typical Connections - Adaptor Couplings

Universal Adaptors

Salt Glazed Ware (4")	100mm	NAC 4000	110mm	PVC-u
Vitrified Clay	100mm		100mm	Cast Iron (soil & drain)
Supersleve	100mm		100mm	Cast Iron (smu/ensign/sml)
Pitch Fibre	100mm		100mm	Ductile Iron
Asbestos Cement	100mm		100mm	Stainless Steel
			100mm	Supersleve
Salt Glazed Ware (6")	150mm	NAC 6000	160mm	PVC-u
Vitrified Clay	150mm		150mm	Cast Iron (soil & drain)
Supersleve	150mm		150mm	Cast Iron (smu/ensign/sml)
Pitch Fibre	150mm		150mm	Ductile Iron
Asbestos Cement	150mm		150mm	Stainless Steel
Concrete	150mm		150mm	Supersleve
Ultra-Rib	180mm		150mm	Ultra-Rib
PVCu	200mm			
Salt Glazed Ware (9")	225mm	NAC 9001	150mm	Vitrified Clay
Vitrified Clay	225mm		150mm	Supersleve
Ductile Iron	250mm		150mm	Pitch Fibre
Grey Iron	250mm		150mm	Asbestos Cement
MDPE	280mm		150mm	Concrete
			180mm	MDPE
			180mm	Ultra-Rib
			200mm	PVCu
			200mm	MDPE

Drainage Adaptors

PVCu	110mm	NAC 1221	82mm	(3") PVCu
Cast Iron (soil & Drain)	100mm		75mm	Cast Iron (soil & drain)
Cast Iron (smu/ensign/sml)	100mm		75mm	Cast Iron (smu/ensign)
Ductile Iron	100mm		70mm	Cast Iron (smu/ensign/sml)
Supersleve	100mm			
PVCu	110mm	NAC 1226	50mm	(2") Cast Iron (soil & drain)
Cast Iron (soil)	100mm		50mm	Cast Iron (smu/ensign/smu)
Cast Iron (smu/ensign/smu)	100mm			
Stainless Steel	110mm			
PVCu	110mm	NAC 5144	75mm	Ductile Iron
Supersleve	100mm		100mm	Cast Iron (soil)
Cast Iron (soil & drain)	100mm		100mm	Cast Iron (smu/ensign/sml)
Cast Iron (smu/ensign/sml)	100mm		100mm	Stainless Steel
Ductile Iron	100mm		110mm	PVCu
Stainless Steel	100mm			
Asbestos Cement	100mm			
Supersleve	100mm	NAC 1361	82mm	(3") PVCu
Vitrified Clay	100mm		75mm	Cast Iron (soil & drain)
Asbestos Cement	100mm		75mm	Cast Iron (smu/ensign)
Cast Iron (smu/ensign/sml)	125mm		70mm	Cast Iron (smu/ensign/sml)
Supersleve	100mm	NAC 1362	100mm	Cast Iron (soil)
Vitrified Clay	100mm		100mm	Cast Iron (smu/ensign/sml)
Asbestos Cement	100mm		100mm	Stainless Steel
Cast Iron (smu/ensign/sml)	125mm		110mm	PVCu
PVCu	160mm	NAC 1602	110mm	(3") PVCu
Cast Iron (smu/ensign/sml)	150mm		100mm	Cast Iron (soil & drain)
Stainless Steel	150mm		100mm	Cast Iron (smu/ensign/sml)
			100mm	Ductile Iron
			100mm	Stainless Steel
			100mm	Supersleve
Vitrified Clay (Salt Glazed Ware)	150mm	NAC 1922	110mm	PVCu
Supersleve	150mm		100mm	Cast Iron (soil & drain)
Ultra-Rib	150mm		100mm	Cast Iron (smu/ensign/sml)
Ductile Iron	150mm		100mm	Ductile Iron
Cast Iron (drain)	150mm		100mm	Stainless Steel
Asbestos Cement	150mm		100mm	Supersleve
Pitch Fibre	150mm			
Twin Walled Plastic	150mm			
Vitrified Clay (Salt Glazed Ware)	150mm	NAC 1923	100mm	Supersleve
Supersleve	150mm		100mm	Vitrified Clay
Ultra-Rib	150mm		100mm	Asbestos Cement
Ductile Iron	150mm		125mm	Cast Iron (smu/ensign/sml)
Cast Iron (drain)	150mm			
Asbestos Cement	150mm			
Pitch Fibre	150mm			
Twin Walled Plastic	150mm			
Vitrified Clay (Salt Glazed Ware)	150mm	NAC 1924	160mm	PVCu
Supersleve	150mm		150mm	Cast Iron (smu/ensign/sml)
Ultra-Rib	150mm		150mm	Stainless Steel
Ductile Iron	150mm			
Cast Iron (drain)	150mm			
Asbestos Cement	150mm			
Pitch Fibre	150mm			
Twin Walled Plastic	160mm			

Pipe Couplings



Used in drainage systems to connect pipes where resistance to shear loads is not required.

Applications include:

- Repair of an existing drain by insertion of a new length of pipe
- Adaptor between pipes of different materials or manufacturers
- Jointing short lengths of pipe

Coupling Ref.	Min OD (mm)	Max OD (mm)	Width (mm)	Box Qty
NPC 115	100	115	100	20
NPC 125	110	125	100	20
NPC 135	120	135	120	20
NPC 150	135	150	150	20
NPC 165	150	165	150	10
NPC 175	160	175	120	10
NPC 185	170	185	120	10
NPC 195	180	195	120	10
NPC 215	200	215	150	8
NPC 225	210	225	150	6
NPC 250	235	250	150	6
NPC 275	260	275	150	6

Typical Connections - Pipe Couplings

NPC 115	110mm PVCu 100mm Cast Iron (soil) 100mm Cast Iron (smu/ensign) 100mm Stainless Steel 100mm Corrugated Plastic 100mm ABS
NPC 125	100mm Supersleve 100mm Cast Iron (drain) 100mm Ductile Iron 100mm Grey Iron 100mm Asbestos Cement 100mm Pitch Fibre 100mm Twin-wall Plastic
NPC 135	100mm Supersleve 100mm (4") Salt Glazed Ware 100mm Vitrified Clay 100mm Densleeve 100mm Pitch Fibre 100mm Asbestos Cement
NPC 165	160mm PVCu 150mm Cast Iron (smu/sml/ensign) 150mm Stainless Steel 160mm Polypropylene
NPC 175	150mm Ultra-Rib 150mm Quantum 150mm Ductile Iron 150mm Grey Iron 150mm Twinwall Plastic 150mm Corrugated Plastic
NPC 185	150mm Supersleve 150mm Pitch Fibre 150mm Asbestos Cement 150mm Twinwall Plastic 150mm Corrugated Plastic
NPC 195	150mm Supersleve 150mm (6") Salt Glazed Ware 150mm Vitrified Clay 150mm Asbestos Cement 150mm Pitch Fibre 150mm Densleeve

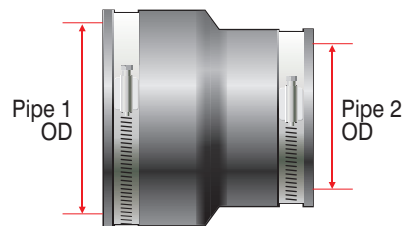
Plumbing Range

Used for connecting smaller diameter pipes. The couplings are designed for connecting pipes with a similar outside diameter and the adaptors for connecting pipes of differing outside diameters.

Couplings



Coupling Ref.	Min OD (mm)	Max OD (mm)	Width (mm)
NPC 32	24	32	70
NPC 40	32	40	70
NPC 50	40	50	70
NPC 65	50	65	90
NPC 85	70	85	100
NPC 95	80	95	100



Adaptors



Coupling Ref.	Pipe 1 OD (mm)	Pipe 2 OD (mm)	Width (mm)
NAC 0301	32-40	24-32	65
NAC 0401	40-50	32-40	65
NAC 0501	50-65	35-42	60
NAC 0601	59-64	70-75	70
NAC 0751	75-90	40-50	100
NAC 0752	75-90	50-64	70

Typical Connections - New plumbing Range

Straight Couplings for Plumbing Applications

NPC 35	35mm Copper 32mm Polypropylene
NPC 43	42mm Copper 40mm Polypropylene
NPC 56	50mm Polypropylene/HDPE 54mm Copper
NPC 68	50mm Cast Iron (smu/ensign/sml) 50mm Cast Iron BS416/BS437 67mm Copper 68mm Plastic Rainwater Pipe
NPC 76	75mm PVCu
NPC 85	75mm Cast Iron (smu/ensign) 76mm Copper 70mm Cast Iron (sml)
NPC 92	75mm Cast Iron BS416/BS437
NPC 100	93mm Copper

Adaptor Couplings for Plumbing Applications

Copper 35mm Polypropylene 40mm	NAC 0431	40mm Polypropylene
Polypropylene 40mm ABS 40mm	NAC 0562	54mm Copper 50mm ABS 50mm Polypropylene
Polypropylene 40mm ABS 40mm	NAC 0682	50mm Cast Iron BS416/BS437 67mm Copper 50mm Cast Iron (smu/ensign/smu) 50mm Aluminium
Copper 54mm Polypropylene 50mm ABS 50mm	NAC 0923	82mm PVCu 75mm Cast Iron (BS416/BS437) 75mm Cast Iron (smu/ensign) 75mm Stainless Steel
Cast Iron (BS416/BS437) 50mm Cast Iron (smu/ensign/smu) 50mm Aluminium 50mm Copper 50mm	NAC 0924	82mm PVCu 75mm Cast Iron (BS416/BS437) 75mm Cast Iron (smu/ensign) 75mm Stainless Steel

Note: The couplings also fit the imperial equivalent

End Caps



A reusable and flexible, easy to fit cap for permanent or temporary applications such as air testing waste or soil systems, capping or preventing dirt ingress.

Product Ref.	Min-Max OD (mm)	Pipe DN
NEC 45	45-55	38
NEC 56	56-66	50
NEC 80	80-90	75
NEC 105	105-115	100
NEC 155	155-165	150
NEC 205	205-215	200

How to select a coupling

Obtain the precise outside diameters of the pipes to be joined. Guidance figures for a variety of material diameters are provided in the table below (NB these are not intended to be a substitute for site measurements). Check the range list to see which coupling reference has a range of sizes which the outside diameters of the pipes fall within. If this is

not successful, Bushes are available in a variety of sizes and thicknesses to allow the standard range of couplings to connect pipes which may have a considerable difference in their outside diameters. Adaptor Couplings allow differing outside diameters to be connected without the need to use Bushes.

TABLE INDICATING TYPICAL OUTSIDE PIPE DIAMETERS (for guidance only)

PIPE MATERIAL		Internal Sizes (DN)																		Imperial Sizes								
		40	50	75	100	125	150	175	180	200	225	250	300	375	400	450	500	525	600	3	5	8	9	10	12	15	18	
		Nominal Outside Diameter (mm)																										
Vitrified Clay					131		188	220			245	278		374	465	484	522	607		730	98	156	238	268	295	356	445	533
Salt Glazed Clay														380		506	544	635		755								
Supersleve (thin walled clay)					122		178					263		357														
Concrete							200					286		375	457		580		675	770								
												305		425	464		540		690	785								
												292		386	485		552											
														410	520		570											
														506		590												
Asbestos	L				125		182	208			232	260	288					547										
	M													339	423	437	484	551										
	H													346	429	440	490	559										
PVC-U					110		160				200		250	315		406	457	508										
Ultra-Rib							170		200			250		335														
Quantum							160					250		330														
Rigidrain							177					264		351														
ABS		43	56		110	160	200			225		280	315							89	140	219			273	323		
Polyethylene					111	126	161		181	201	226	251	317		402	452	503											
Polypropylene/PE twin walled					119	150	180			235	260		360		455	490	590		690									
Corrugated PVC-u lightweight					110	170					250																	
Polypropylene		41	54																									
		43																										
muPVC		54																										
Ductile Iron BS4772				98	118	170				223	258	274	326	403	429	480	532		635		148							
Cast Iron (SMU/Ensign)			60	85	112	137	162			212		279	329															
Cast Iron BS437 (Drain)			65	92	119	173					256									92								
Cast Iron BS416 (Soil)			63	89	114	140	165			210										89								
Cast Iron (Spun) BS1211	B																								334	413	492	
	C, D																								345	426	507	
Copper			54	76	108															79.9								
Grey Iron					118	170				222		274	326		429	480	532		635									
Stainless Steel					110	160																						
Pitch Fibre				75	125	181				238																		
Aluminium			53	76	102																							