### Standard Couplings 50-620mm



Product Code	SCXXX	
Description	Fernco Standard Coupling	
Width	190mm	
Size Range	50 - 620mm	
Material	EPDM 1.4301 (304) Stainless Steel Couplings with a different material makeup are available on request.	
Pressure Rating	2.5bar, 36.25psi	
Temperature Range	-50°c to 80°c constant, 100°c intermittent	
Jetting Resistance	180 bar	
Standards	WIS 4-41-01 BS EN 681-1:1996 BS EN 295-4:2013 BS EN 10088-2:1995 BS EN 16397	

Product Code	Size Range (mm)	Tightening Torque	Maximum difference between pipes OD's (mm)	
SC65	50 - 65	6Nm	6	
SC75	60 - 75	6Nm	6	
SC85	70 - 85	6Nm	6	
SC95	80 - 95	6Nm	6	
SC115	100 - 115	6Nm	6	
SC120	105 - 120	6Nm	6	
SC125	110 - 125	6Nm	6	
SC137	122 - 137	6Nm	6	
SC150	125 - 150	6Nm	6	
SC165	140 - 165	6Nm	6	
SC175	150 - 175	6Nm	6	
SC185	160 - 185	6Nm	6	
SC200	175 - 200	6Nm	6	
SC215	190 - 215	13Nm	6	
SC225	200 - 225	13Nm	6	
SC250	225 - 250	13Nm	6	
SC265	240 - 265	13Nm	6	
SC275	250 - 275	13Nm	6	
SC290	265 - 290	13Nm	6	
SC310	285 - 310	13Nm	8	
SC320	295 - 320	13Nm	8	
SC335	310 - 335	13Nm	8	
SC345	320 - 345	13Nm	8	
SC360	335 - 360	13Nm	8	
SC370 SC385	345 - 370 360 - 385	13Nm	8	
SC395	300 - 385 370 - 395	13Nm 13Nm	8 8	
SC410	385 - 410	13Nm	o 8	
SC410 SC425	400 - 425	13Nm	o 8	
SC425 SC430	400 - 425 405 - 430	13Nm	8	
SC450	405 - 450 420 - 445	13Nm	8 10	
SC450	420 - 445	13Nm	10	
SC465	440 - 465	13Nm	10	
SC405	445 - 470	13Nm	10	
SC490	465 - 490	13Nm	10	
SC510	485 - 510	13Nm	10	
SC525	500 - 525	13Nm	10	
SC540	515 - 540	13Nm	10	
SC550	525 - 550	13Nm	10	
SC560	535 - 560	13Nm	10	
SC570	545 - 570	13Nm	10	
SC580	555 - 580	13Nm	10	
SC600	575 - 600	13Nm	10	
SC620	595 - 620	13Nm	10	

Bushes can be used to accommodate differences between pipe OD's which fall outside the limitations of the coupling.

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# Shear Banded Couplings

- · Withstands internal pressure of up to 2.5 bar
- Stainless steel shear band helps prevent pipe displacement
- Less excavation compared to replacing a whole length of pipe
- Approved to WIS 4-41-01- Flexible couplings for gravity sewerage and drainage pipes
- Complies to BS EN 681-1:1996, BS EN 295-4:2013, BS EN 10088-2:1995 & BS EN 16397

Fernco shear banded couplings are specifically designed to connect and repair pipes on adopted sewer and drainage applications, as required by the UK water companies. The stainless steel central band protects the joint under shear loads and helps to keep the joining pipes aligned, helping to prevent pipe displacement.

Fernco manufactures the most extensive range of Shear Banded Couplings available in the marketplace and has revolutionised traditional pipe repair methods over the years. Fernco shear banded couplings are specifically designed to connect and repair pipes on adopted sewer and drainage applications.

Shear banded couplings are a requirement of the UK water companies when connecting onto their assets. This requirement forms part of Water Industry Specification (WIS) 4-41-01, which outlines the requirements to connect pipes on adopted systems using only shear banded couplings.

The shear band on this range of couplings gives the connection added protection against shear loads that could cause the pipes to become mis-aligned.

<image>

Fit horizontally or vertically for above or below ground applications

NOTE: Although Drain Couplings are available to connect unadopted drainage systems, Fernco would recommend the use of Shear Banded Couplings for any drainage connection underground for added reassurance of joint alignment over time and to follow best practice.

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## Shear Banded Coupling Variants

Standard Coupling

Extra Wide Standard Coupling

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Large Coupling Extra Wide Large Coupling Magnum Coupling

Standard Coupling	Extra Wide Standard Coupling	Large Coupling	Extra Wide Large Coupling	Magnum Coupling		
80-190mm varies depending on coupling diameter	300mm	190mm	300mm	370mm		
50-620mm	200-620mm	400mm +	400mm +	300mm +		
8mm Worm Drive	8mm Worm Drive	M8 13mm Bolt	M8 13mm Bolt	M8 13mm Bolt		
2.5bar	2.5bar	LC400-599: 2.5bar LC600-999: 1.5bar LC1000-1399: 1bar LC1400+: 0.5bar	LC400-599W: 2.5bar LC600-999W: 1.5bar LC1000-1399W: 1bar LC1400W+: 0.5bar	MAG300: 4bar MAG400-599: 2.5bar MAG600-999: 1.5bar MAG1000+: 1bar		
Max: ≤ SC137: 20mm ≤ SC290: 45mm ≤ SC620: 50mm	Max: 150mm	Max: 50mm	Max: 150mm	Max: 160mm		
A minimum joint gap should be allowed to account for any pre-set angular deflection before tightening and practical angular deflection after installation						
Used to connect two plain ended pipes when additional pipe alignment protection is required, usually when a joint is subject to heavy shear loads. Shear banded couplings are advised for all connections made on adopted drainage systems to protect water company assets.	Used to connect two plain ended pipes when an extended sealing zone is required, such as, a connection to Twinwall pipe to create a seal on more ribs or when a greater pipe deflection is required than Standard Couplings can provide. Connections to Twinwall pipes between 225- 600mm should use Extra Wide Standard Couplings as opposed to Standard Couplings.	Used to connect two plain ended pipes above 400mm, usually in cases when drainage lines are being extended and therefore socket connections are not present. Connections to concrete pipes above 400mm should use Large Couplings as opposed to Standard Couplings.	Used to connect two pipes where a cut section has left the pipe end uneven or not square to the axis of the pipe; this coupling will bridge the gap. Extra Wide Large Couplings are usually used as standard on pipes above 1000mm to compensate for this and for improved angular deflection. Extra Wide Large Couplings are to be used on Twinwall pipes from 600mm as the sealing zone covers more ribs that the narrower Large Coupling.	Used to connect two pipes where a cut section has left a pipe end severely uneven or not square to the axis of the pipe. Additional bolts with the Magnum Coupling provides extra strength.		
	80-190mm   varies depending on   coupling diameter   50-620mm   8mm Worm Drive   2.5bar   Max:   ≤ SC137: 20mm   ≤ SC290: 45mm   ≤ SC200: 50mm   Used to connect two   plain ended pipes when   additional pipe alignment   protection is required,   usually when a joint is   subject to heavy shear   loads. Shear banded   couplings are advised   for all connections made   on adopted drainage   systems to protect water	Standard CouplingStandard Coupling80-190mm300mmvaries depending on coupling diameter300mm50-620mm200-620mm8mm Worm Drive8mm Worm Drive8mm Worm Drive2.5bar2.5bar2.5bar2.5bar2.5barMax: ≤ SC137: 20mm ≤ SC290: 45mm ≤ SC620: 50mmMax: 150mmUsed to connect two plain ended pipes when additional pipe alignment protection is required, usually when a joint is subject to heavy shear loads. Shear banded couplings are advised for all connections made on adopted drainage systems to protect water company assets.Used to connect water pipe to create a seal on more ribs or when a greater pipe deflection is required than Standard Couplings can provide. Connections to Twinwall pipes between 225- 600mm should use Extra Wide Standard Couplings as opposed to Standard	Standard CouplingStandard CouplingLarge Coupling80-190mm80-190mm300mm190mmvaries depending on coupling diameter300mm190mm50-620mm200-620mm400mm +8mm Worm Drive8mm Worm DriveM8 13mm Bolt2.5bar2.5barLC400-599: 2.5bar LC600-999: 1.5bar LC1000-1399: 1bar LC1400+: 0.5barMax: < \$C290: 45mm \$ SC620: 50mmMax: 150mmMax: 50mmMax: < \$C290: 45mm \$ SC620: 50mmMax: 150mmMax: 50mmUsed to connect two plain ended pipes when additional pipe alignment protection is required, usually when a joint is subject to heavy shear loads. Shear banded couplings are advised for all connections made on adopted drainage systems to protect water company assets.Used to connect two plainended pipes between 225- 600mm should use Extra Wide Standard Couplings as opposed to StandardUsed to couplings.	Standard CouplingStandard CouplingLarge Coupling80-190mm varies depending on coupling diameter300mm190mm300mm50-620mm200-620mm400mm +400mm +8mm Worm Drive8mm Worm DriveM8 13mm BoltM8 13mm Bolt2.5bar2.5bar2.5barLC400-599: 2.5bar LC600-399: 1.5barLC400-599W: 2.5bar LC600-399: 1.5bar2.5bar2.5bar2.5barLC400-599: 2.5bar LC600-399: 1.5barLC4000-1399W: 1.5bar LC1000-1399W: 1.5barMax: < \$C137: 20mm \$C250: 45mmMax: 150mmMax: 50mmMax: 150mmMax: < \$C230: 45mm		

Note: Concrete pipes can sometimes have imperfections on their surface due to the casting process. Thus, when connections are made onto concrete pipes, it is recommended to apply a neat cement grout to the sealing area; this provides a smooth surface and ensures an airtight seal. Due to the variable nature of concrete, no pressure over 0.5 to 1.0 bar (dependent on size) can be guaranteed. The stated maximum pressure ratings are only achievable when couplings are fitted onto pipes with a good surface finish i.e. PVC, GRP, and Clay.

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for iOS & Android

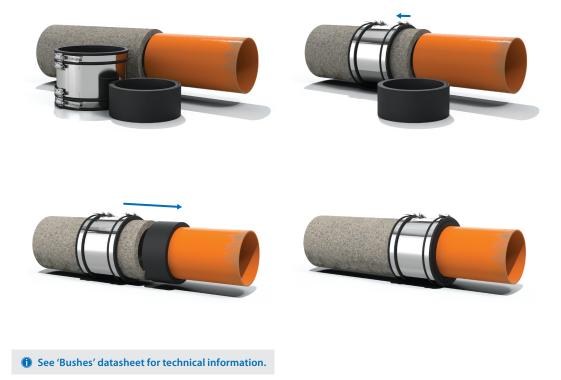
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# Connecting Different Size Pipes

Shear Banded Couplings have the ability to connect two pipes with the same or similar outside diameter (OD), and also have the flexibility to accommodate small differences in pipe OD's.

When the pipe OD's are outside of the limitations of a Shear Banded Coupling, 'Bushes' can be used to make up the annual space between the smaller pipe OD and the Shear Banded Coupling.



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1. Mark both pipes, from the end to be connected, half the width of the coupling, less the required joint gap, which is usually 10mm.



**3.** Align the pipes and slide the coupling onto the other pipe, ensuring the coupling face and marked line are flush. Tighten this clamp band.



2a. Slide the coupling fully over one of the pipes.



**2b.** If replacing a cut section of pipe, slide both couplings over each of the existing drain pipes.



4. Position the second pipe, ensuring the coupling face and marked line are flush. Tighten this clamp band.



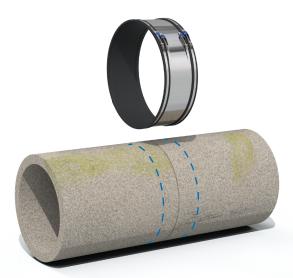
**5.** Tighten all clamp bands to the recommended torque in sequence across the width of the coupling starting with the central shear band.

Tamp the bedding under the pipe and re-tighten prior to backfilling.





# Installation



1. Mark both pipes, from the end to be connected, half the width of the coupling, less the required joint gap, which is usually 10mm.



**3.** Align the pipes and slide the coupling onto the other pipe, ensuring the coupling face and marked line are flush. Tighten this clamp band.



2a. Slide the coupling fully over one of the pipes.2b. If replacing a cut section of pipe, slide both couplings over each of the existing drain pipes.



4. Position the second pipe, ensuring the coupling face and marked line are flush. Tighten this clamp band.

**5.** Tighten all clamp bands to the recommended torque in sequence across the width of the coupling starting with the central shear band.

Tamp the bedding under the pipe and re-tighten prior to backfilling.

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# General Information

#### **Quality, Standards and Approvals**

Fernco has been certified by the British Standards Institution (BSI) as a company of assessed capability, with a quality management system which meets the requirements of BS EN ISO 9001:2015

Fernco UK, part of a global group of companies, are the leaders in wastewater connection innovation; utilising the most advanced methods and techniques for precision-manufactured products, all of which comply with or exceed relevant British and European standards to ensure reliability and sustainability.

#### Environment

Fernco operate Environmental Management Systems which are certified to ISO 14001: 2015.

#### Supply

Fernco are proud members of the Builders Merchants Federation (BMF). All Fernco products are supplied through a national and global network of distribution and merchant partners. For stockist details, contact Fernco.

#### **Technical Support**

Fernco have a team of product experts on hand to support all customers with technical support and advice.

Contact Fernco Technical Department:

Tel: +44 (0) 1226 344100

Email: technical@fernco.co.uk

#### **Enquiries**

UK Sales: Tel: +44 (0) 1226 340 888 Email: sales@fernco.co.uk

International Sales: Tel: +44 (0) 1226 344 105 Email: export.dept@fernco.co.uk

**C** +44 (0) 1226 340 222

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