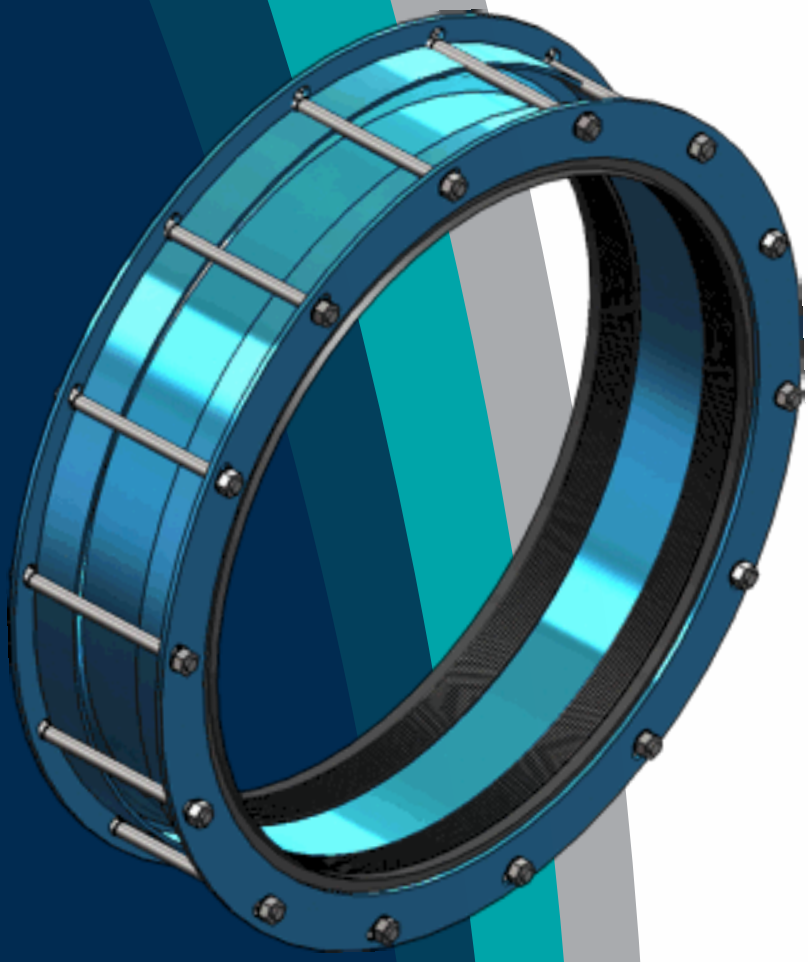
AFRILOK COUPLINGS

STANDARD INSTALLATION INSTRUCTIONS



100% SOUTH AFRICAN

LEVEL 4 BEE CONTRIBUTOR

AFRILOK

AFRICA'S COUPLING

INSTALLATION INSTRUCTIONS

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EQUIPMENT REQUIRED

TORQUE WRENCH

SPANNER

RATCHET

LONG SOCKET

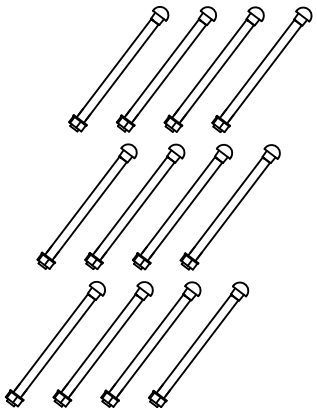
SOAPY WATER

MINERAL OIL

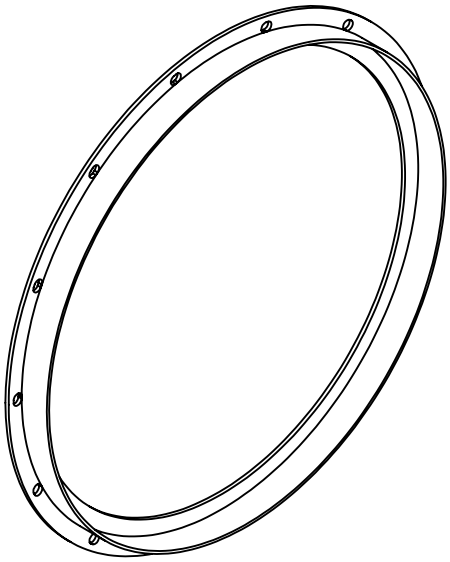
COMPONENTS

Couplings typically consist of three components and are typically pre-assembled. These components are :

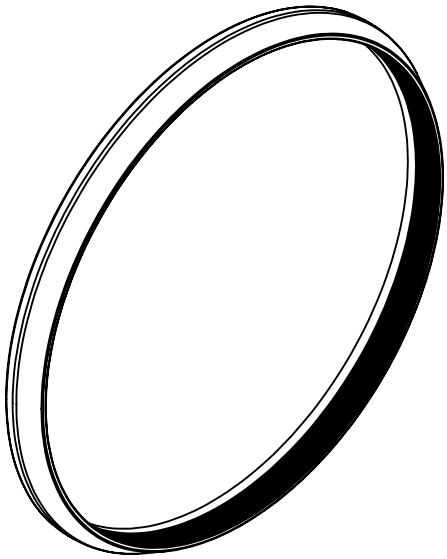
a) Two (2) end rings
b) One (1) centre sleeve
c) Two (2) rubber gaskets
d) Bolts, nuts and washers



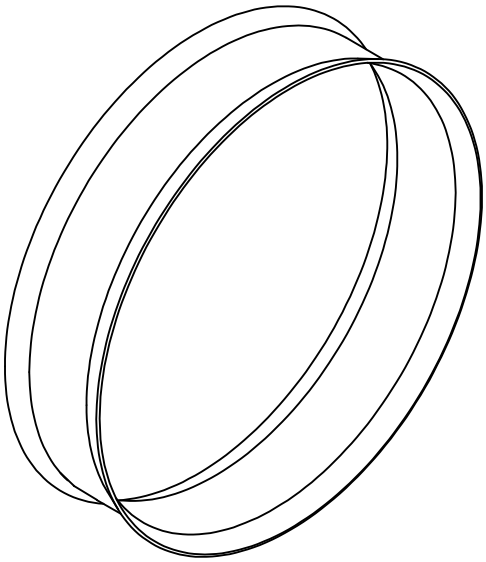
Bolts, nuts and washers
(Quantities dependent on model coupling)



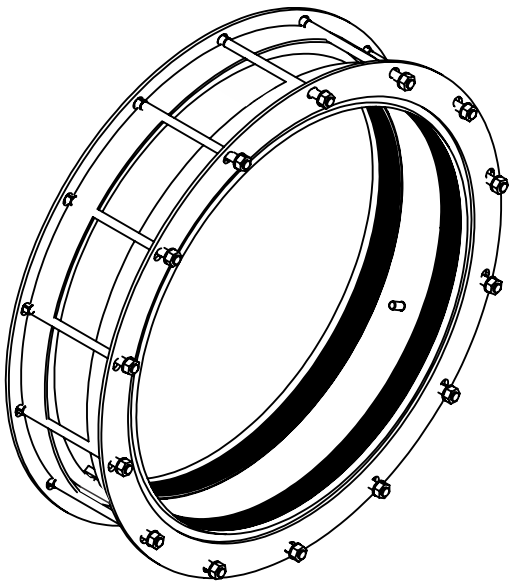
Two (2) End Rings



Two (2) Rubber Gaskets



One (1) Centre Sleeve



Assembled Coupling with bolts

AFRILOK COUPLINGS ARE PRE-ASSEMBLED DO NOT DISASSEMBLE

STEP 1: PREPARING THE PIPES

Examine the pipe ends ensuring they are round, smooth, free from bulges, dents, score marks, scale, rust or loose debris and within the correct pipe diameter range provided for the coupling. Weld beads must be ground flush, maintaining correct surface profile.

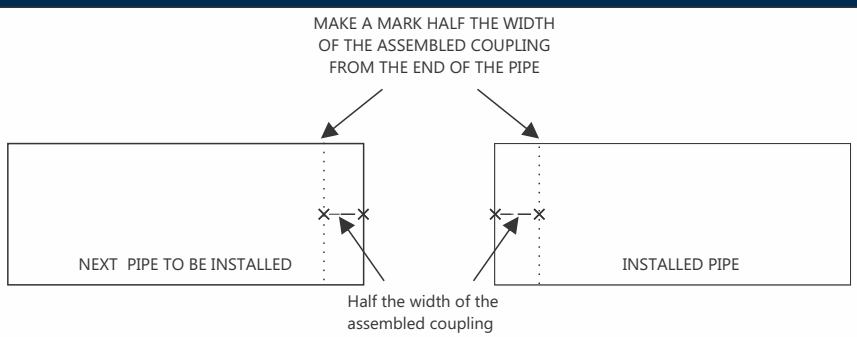
STEP 2: LUBRICATION OF THE GASKET

Lubrication of the gasket is very important. The rubber seal must be sufficiently lubricated where it comes into contact with the coupling centre barrel. Apply a suitable lubrication such as soapy water to the gaskets to ensure adequate lubrication. **DO NOT** use any mineral based oils as it will degrade the rubber used in the gasket.

STEP 3: INSTALLING THE COUPLING

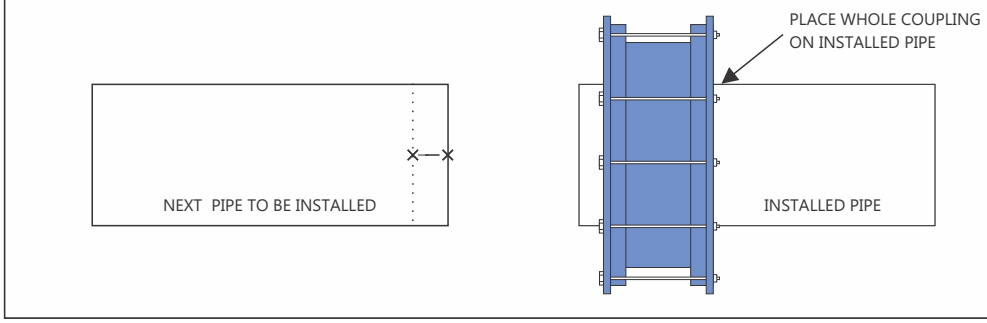
a) Align pipes to be laid with pipe already in position, taking care that pipe ends are concentric, adjusting support or trench bed as necessary. Make a mark equal to half the overall assembled width of the coupling from the end of the installed pipe as well as the next pipe to be installed.

STEP 3a: ALIGNING AND MARKING OF PIPES



b) Place the whole coupling on one end of the **installed pipe.**

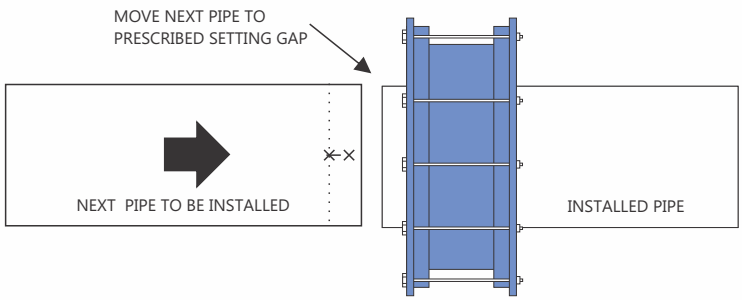
STEP 3b: PLACING COUPLING ON PIPE



c) Adjust setting gap between pipe ends as necessary according to the following table:

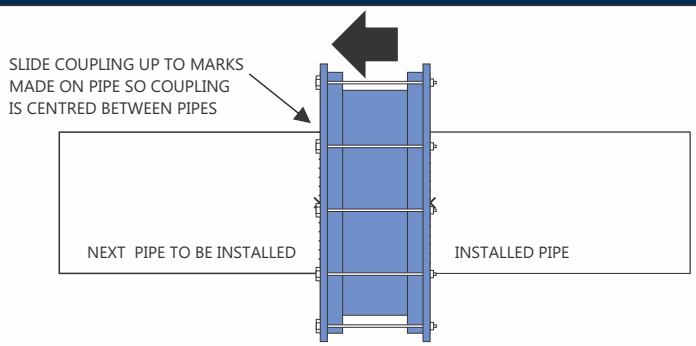
Setting Gap	Min (mm)	Max (mm)
Up to DN200	16	32
Over DN250 to DN700	20	40

STEP 3c: SETTING GAP BETWEEN PIPES



d) Using marks made on the pipes, move the coupling until the outside edge of the end rings line up with the mark made on the pipes.

STEP 3d: SLIDE PIPE INTO COUPLING UP TO MARK

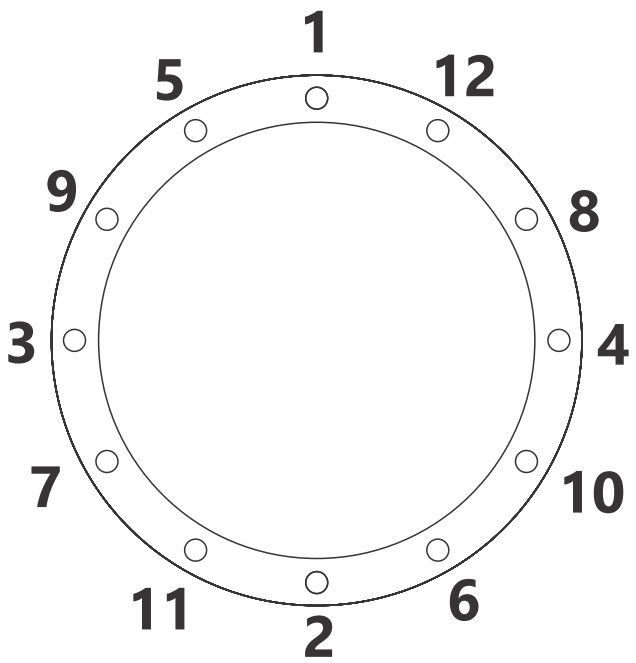


STEP 4: TIGHTENING FASTENERS

Lightly apply mineral based oil to bolt threads to facilitate installation. To assure correct rubber seal compression, bolts must be tightened in diametrically opposite pairs as per the drawings below, similar to the way a motor vehicle wheel is tightened. Bolt up evenly giving the nuts 2 or 3 turns at a time to the prescribed torque rating as follows:

M12 Bolts: Torque = 70 - 80Nm

The bolts must be thoroughly tightened to the prescribed torque rating given above, working around the coupling as many times as necessary. On completion, the radial gap between pipe and coupling should be even all the way round. Rubber may be seen to extrude into the gap.



STEP 5: TESTING

If any leakages are detected on the couplings when the pipeline is being tested, the fasteners on the affected coupling needs to be tightened further until no further leakage occurs.

OPERATION AND MAINTENANCE

There are no specific maintenance or special operational requirements for these couplings. MaintenanceIt may however be necessary to re-tighten the fasteners on these couplings from time to time due to the vibrations experienced during the operation of a pipeline which may cause the fasteners and accordingly the gaskets to relax.

There is no prescribed time period for this type of maintenance and the operator has to determine whether re-tightening may be needed based on visual inspections. This should typically be evident from some leakage being witnessed on the couplings.

AFRILOK

CONNECTING AFRICA'S PIPES

LEVEL 4 BEE CONTRIBUTOR

100% SOUTH AFRICAN

Tel: +27 12 803 5575 Fax: 086 725 7888
www.afrilok.com | info@afrilok.com