



Fitting instructions for Centaflex couplings

with highly elastic rubber elements

Important notes - observe strictly

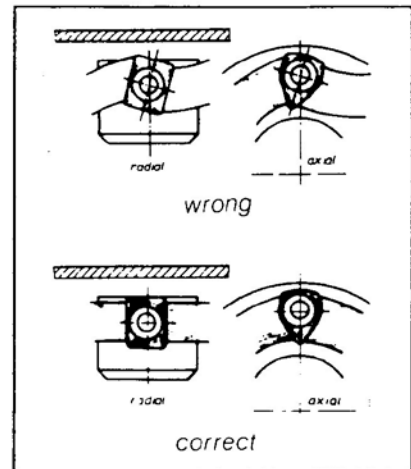
The radial and axial screws connecting the rubber element to the hubs must all be tightened to the torque given in the table below, using a **torque wrench**.

Tightening with a torque wrench is particularly important with the larger sizes. Tightening "by feel" will not do as experience has proved the tightening torques in such cases are far too low.

Tightening torques which are too low will inevitably lead to slackening of the screws in service and consequently to the destruction of the coupling.

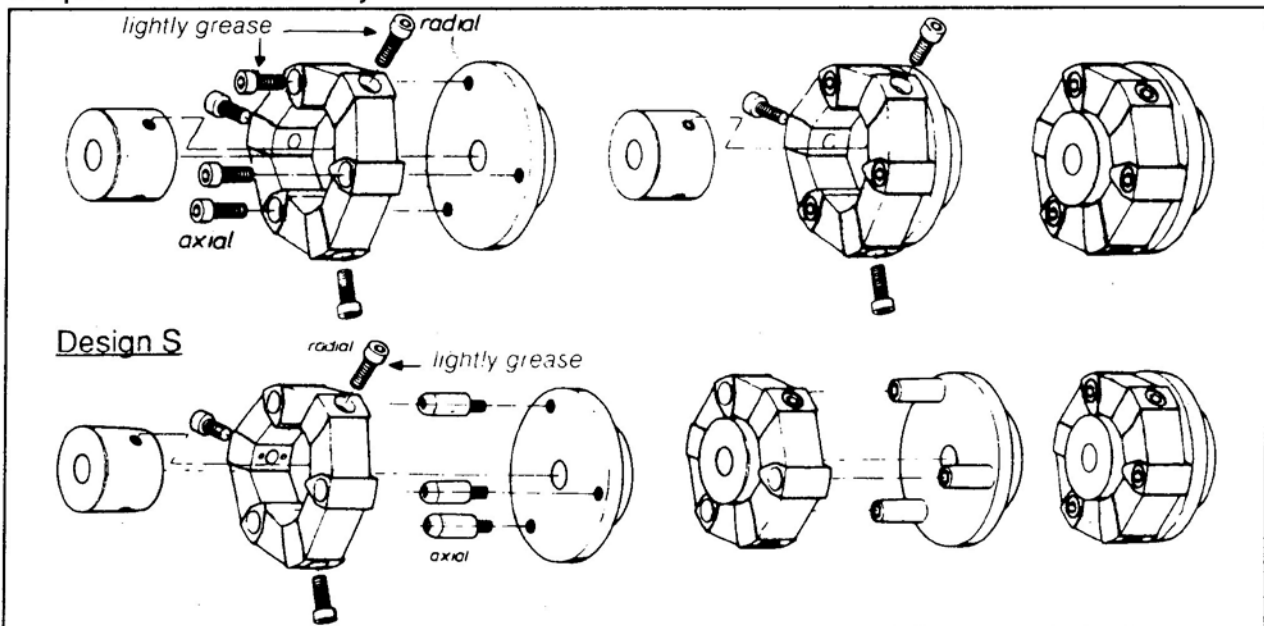
Ensure that on tightening the screws, the aluminium bushes in the rubber part are not twisted at the same time, but sit straight. In

order to reduce friction between the screw head and the aluminium part, a small amount of **grease** should be applied under the head of the screw before fitting. If necessary, use a suitable tool for applying counter pressure on the element to **prevent twisting of the rubber part** during tightening of the screws. This is particularly important with the **radial screws**, otherwise the cylindrical faces between aluminium insert and hub will not engage on the full area, but only on two corners. This will inevitably lead to slackening of the screws and subsequent destruction of the coupling. If the coupling is supplied in a pre-assembled state, do not dismantle it, but fit it in this condition.



Centaflex Size	1	2	4	8/12	16/22	25/28	30	50/80	90/140	200/250	400
Screw Size	M 6	M 8	M 8	M 10	M 12	M 14	M 16	M 16	M 20	M 20	M 20 / M 24
Tightening torque Nm	10	25	25	50	85	140	220	220	500	500	610 / 1050
mKp	1,0	2,5	2,5	5	8,5	14	22	22	50	50	61 / 105

Sequence of Assembly



Standard Design

Fit the hubs onto the shafts or the adaptor plate onto the flywheel.

Fit the rubber element to the flanged hub or flywheel, by means of **axial screws**. **This must be carried out before engaging the radial screws in the cylindrical hub.**

Push the shaft mounted cylindrical hub inside the rubber element and then fasten the rubber element on it with radial screws. During this process, the rubber element is compressed radially and is pre-loaded for increased capacity.

Design S (plug-in or blind fitting type)

Fit the hubs onto the shafts or the adaptor plate onto the flywheel. Fit the axial socket bolts on to the flange hub or adaptor plate on the flywheel. Position the element with the side having the rubber free face of the axial aluminium inserts towards the flange hub and, using the radial screws, mount it on the cylindrical hub. During this process, the rubber element is pulled together radially and receives its pre-load. Then, push the

coupled elements together and in so doing, carefully slide the coupling with light axial pressure onto the socket bolts. The rubber element is subjected to a little more radial compression by the socket bolts, and the pre-load is thus increased. The axial bores in the rubber element should be smeared lightly with grease beforehand to allow the socket bolts to slide easily in the inserts.



Use only the "Inbus Plus" screws provided which are marked on the threads with a micro-encapsulated adhesive which locks the screw in the thread and secures them reliably against slackening. For adequate effect, the hardening period for this adhesive after bolting up is approximately 4-5 hours at room temperature (20 °C). The coupling should not be operated before this time has elapsed.

The adhesive will be fully hardened after 24 hours. Higher temperatures will speed up the hardening process, at 70 °C (using a hot air blower), for instance, the hardening will take only 15 minutes. Inbus Plus is temperature-proof between -80 ° and +90 °C and the screws can be used up to 3 times max. Any adhesive stripped off during bolting up will settle between the hub and the aluminium part, but this will have a beneficial effect in that it enhances the friction grip between these parts.

Note: Anaerobic adhesives (such as Loctite, Omnifit etc.) will loosen the adhesion of the rubber and the insert and will consequently destroy the coupling.

Such adhesives should therefore be avoided if possible. Where the use of this adhesive is unavoidable apply it very sparingly so that no surplus adhesive will moisten the rubber.

We cannot accept any complaints concerning rubber parts which have become defective through the action of adhesives not supplied or recommended by us.

The coupling is completely maintenance-free and does not require any lubrication. Splashing with oil and similar substances should be avoided, since natural rubber is not oil-resistant.

However occasional minor contact with oil or grease is not harmful as this oil will be thrown off during rotation of the coupling.

Centaloc Clamping Hub

If the hubs are equipped with Centaloc-clamping, the clamping screws must be tightened at least to the following tightening torques:

Clamp Screw	Tightening torque (Nm)
M 10	30
M 12	50
M 14	70
M 16	120
M 20	200

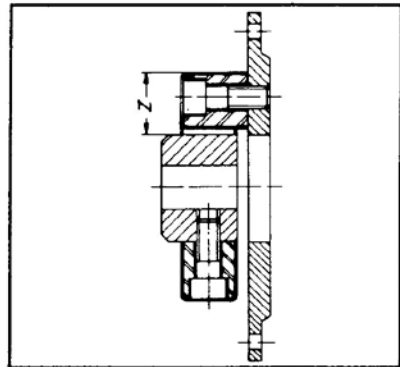
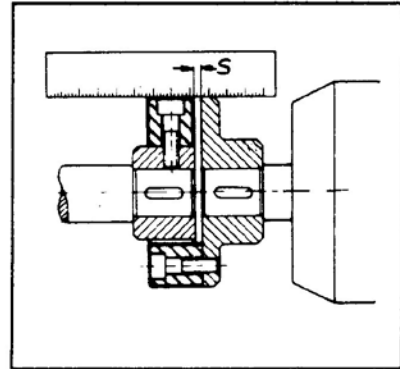
After assembly, the coupling should be carefully aligned if the coupled elements are not already in good alignment by virtue of being spigot located. In the interest of a long service life from the coupling, the higher the speed, the more meticulous should be the alignment. In design type 2, the alignment can very easily be checked with a straight-edge. The outer diameter of the flange hub must be flush with the outer diameter of the rubber element of those areas where the radial screws sit: i.e. in different radial positions.

In design types 1 and 3 the distance "Z" must be measured at all axially bolted points of the rubber element (2, 3 or 4 points depending on the size) and must be set as accurately as possible to the value "Z" quoted in the table below.

For spigot located components there is no need to align the coupling.

Position of cyl. hubs:

The long end of the cyl. hub, usually identifiable by a chamfer, is normally as shown in drawing below. However, in some special applications, the hub must be reversed. When in doubt, install as shown in the relevant installation drawing.



Installation Table: Screw fastener details, dimension 'S' between the hubs, and dimension 'Z'.

CF Size	1	2	4	8/12	16/22	25/28	30	50/80	90	140	200	250	400
Standard Design	M6x10 M6x25	M8x20	M8x25	M10x30	M12x35	M14x40	M16x50	M16x50	M20x65	M20x65	M20x65	M20x80	M24x100 M20x100
Type „S“ Special Bolt Screws	M6 M6x10	M8 M8x20	M8 M8x25	M10 M10x30	M12 M12x35	M14 M14x40	M16 M16x50	M16 M16x50	M20 M20x65	M20 M20x65	M20 M20x65	M20 M20x80	M24 M20x100
Universal joint shaft G	M6x10 M6x25	M8x20	M8x25	M10x30	M12x35	M14x40	M16x50	M16x50	M20x65	M20x65	M20x65	M20x80	M24x100 M20x100
Universal joint shaft GZ axial	M6x10 M6x30	M8x20	M8x25	M10x30	M12x35	M14x40	M16x50	M16x50			M20x65	M20x80	M20x100 M24x110
Dimension „S“ mm	2	4	4	4	6	6	8	8/4	8	8	8	8	10
Dimension „Z“ mm	13	22,5	27,5	30/31	40	42,5	50	50/52,5	67,5	67,5	77,5	90	100

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