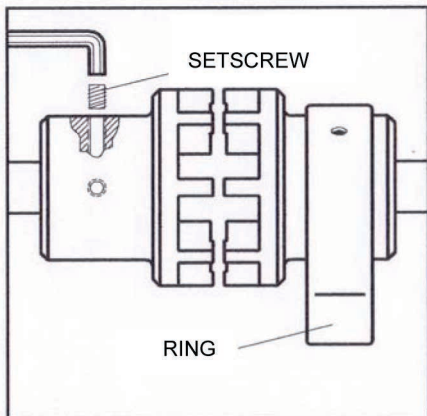


Type A and C elastic coupling

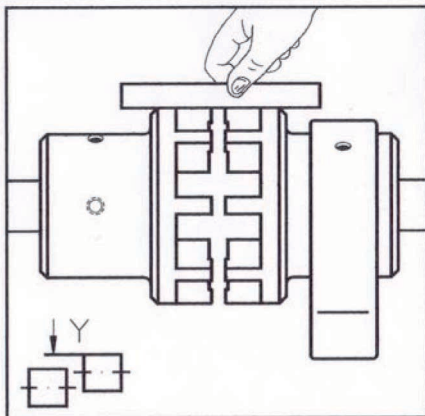
Assembly and alignment instructions



1. ASSEMBLING THE HUBS

Once the hubs have been fitted on the shafts, and prior to lining them up, do not forget to leave the attachment ring fastened onto one of the hubs.

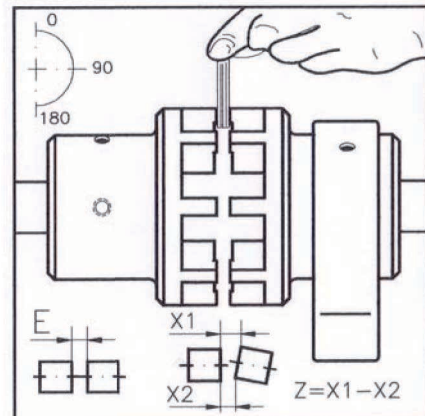
Check the pressure setscrews on the hubs are tight. If the coupling is used in Ex. hazardous areas, the pressure setscrews should be additionally secured against spontaneous loosening in the attachment of the hub to the shaft; for example, using Loctite (medium strength) or similar.



2. RADIAL ALIGNMENT

The radial alignment is controlled with a rule or a dial indicator or laser.

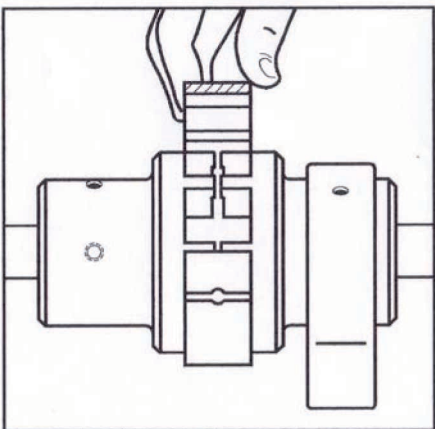
By resting the rule on the periphery of the hubs and matching up two opposite teeth, you will have a sufficiently broad line of contact to check they match up throughout their surface area. Better alignment precision is obtained with the help of a dial indicator or laser (keep to radial tolerance Y).



3. AXIAL AND ANGULAR ALIGNMENT

Position the hubs at distance E, as per Table 1. Using the thickness feelers, you can control the gap between hubs, measurement E (keep to axial tolerance X).

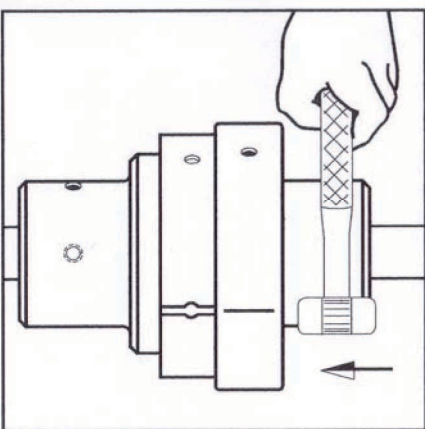
It is advisable to check the values of measurement E in three positions (0 – 90 – 180 degrees), as this will ensure more precise angular alignment (keep to angular alignment Z).



4. ASSEMBLING THE ELASTIC INSERT

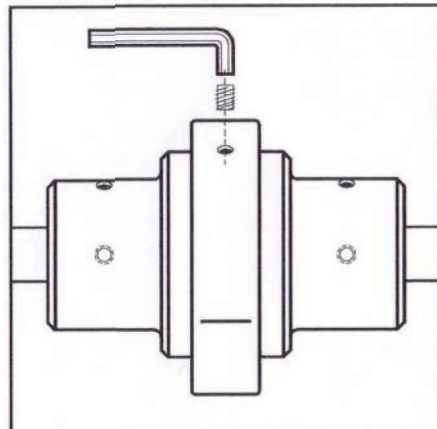
Once the two hubs have been aligned, proceed to assemble the elastic insert in the slots formed by the parallel teeth. If the radial and angular alignment is correct, the ends of the elastic insert, once closed, should match up in their development and width.

The elastic insert has two types of housing: a through housing, with dual inlets, for horizontal work, and a single-inlet housing for vertical work.



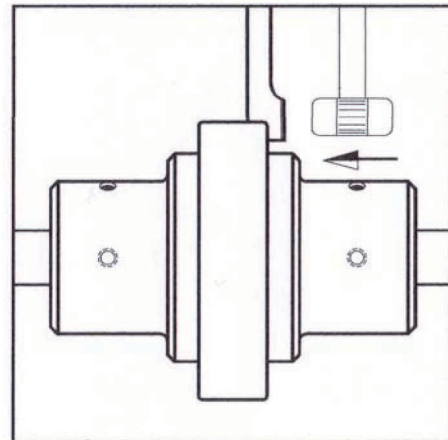
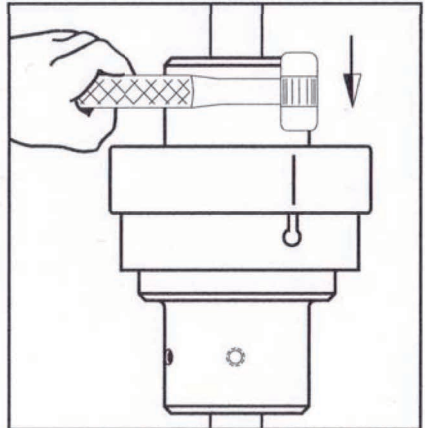
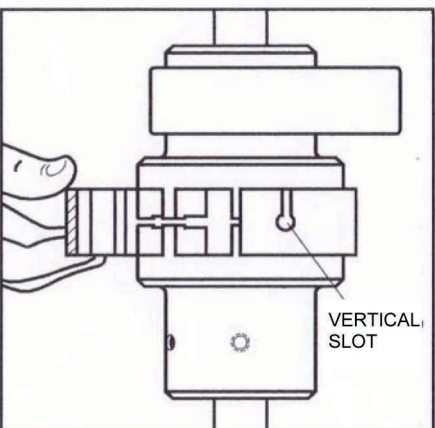
5. ASSEMBLING THE RING

Once the elastic insert has been fitted, the retention ring can be inserted manually, by matching up one of the two reference lines on the outside of the ring with the insertion grooves on the elastic insert. Using a nylon mallet, install the retention ring, tapping alternately on each side of the two areas of the reference marks, until the ring's lugs are coupled into the central housings of the elastic insert.



6. SECURING THE RING

Once the ring has been installed on the elastic insert, it needs to be fastened by inserting the two setscrews into the threaded housings, which match up with those for the elastic insert. **Any potential axial displacement of the ring, due to misalignment of the equipment, is thereby secured.**



7. DISASSEMBLY

Remove the two set screws from the ring. Shift the ring by tapping it on the side with a nylon hammer in the areas the pins (reference lines) are housed.

Table 1

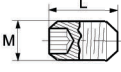
= MISALIGNMENT ADMISSABLE = Dimensions (E) and tolerances in mm.

Type	A00	A0	A1	A2	A3	A4	A45	A5	A55	A6	A7	A8	A9	A10	A11
E	1.5	1.5	1.5	2.5	2.5	3.5	3.5	3.5	3.5	3.5	4	5	5	6	6
Axial X	+0.3	+0.3	+0.5	+0.5	+0.7	+0.8	+1.0	+1.0	+1.0	+1.0	+1.0	+1.5	+1.5	+1.5	+1.5
Radial Y	0.2	0.3	0.3	0.5	0.5	0.7	0.7	0.7	0.8	0.8	1.0	1.0	1.0	1.5	1.5
Angular Z	0.10	0.10	0.20	0.20	0.30	0.40	0.40	0.50	0.50	0.60	0.90	1.10	1.30	1.70	1.70

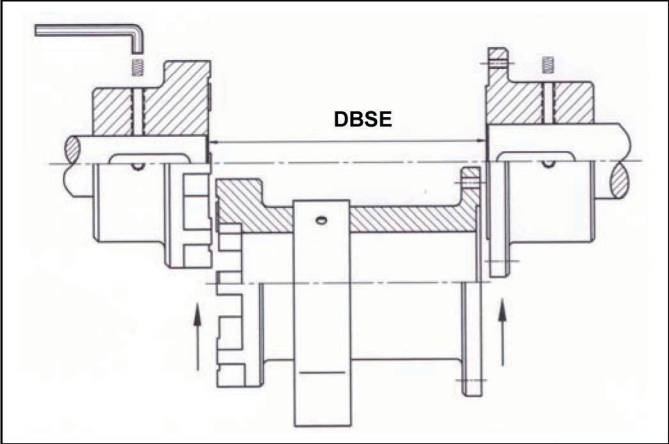
RETAINING THE RING TO THE ELASTIC INSERT

Before starting up the equipment, you must ensure that the ring’s attachment setscrews have been fitted correctly. We recommend securing the tightness of the setscrews by applying Loctite (medium strength) to the screw-threading. The setscrews, when screwed in, should not go deeper than the outer surface of the ring, so that all the ring’s threads are in contact with it. The measurements of the setscrews for each ring type are indicated in table 2.

Table 2

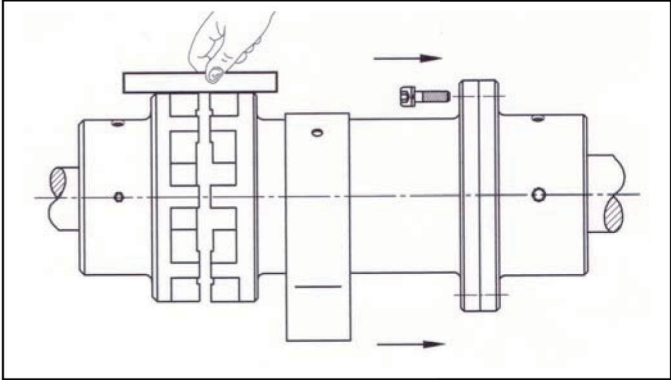
LOCKING SET SCREWS FOR RETAINING RINGS													DIN 913		
TYPE	A00	A0	A1	A2	A3	A4	A45	A5	A55	A6					A11
	-	-	M5	M6	M8	M8	M10	M10	M10	M10	M10	M12	M12	M12	M12
L	-	-	8	12	12	14	14	14	14	14	16	16	16	18	18

samiflex® type “A” and “C” with spacer



1. ASSEMBLING THE HUBS

Once the hubs have been fitted and secured with the setscrews, proceed to line them up, leaving gap DBSE to insert the spacerbody. Do not forget to fit the attachment ring first.



2. ALIGNMENT AND ASSEMBLY

Once the spacerbody has been attached to the flange hub, and the screws secured with their tightening torque (Table 4), position the hub and the spacerbody at distance E, as per Table 3 (keeping to axial tolerance X).

Next, proceed in the same way as for alignment and assembly of coupling A and C.

Table 3

= MISALIGNMENT ADMISSABLE = Dimensions (E) and tolerances in mm.

Type	A1C	A2C	A3C	A4C	A45C	A5C	A55C	A6C	A7C	A8C
E	3.0	3.0	3.5	3.5	3.5	3.5	4.0	4.0	4.0	4.0
Axial X	+0.5	+0.5	+0.7	+0.8	+1.0	+1.0	+1.0	+1.0	+1.0	+1.5
Radial Y	0.1	0.1	0.15	0.20	0.20	0.20	0.20	0.20	0.30	0.30
Angular Z	0.20	0.20	0.30	0.40	0.40	0.50	0.50	0.60	0.90	1.1

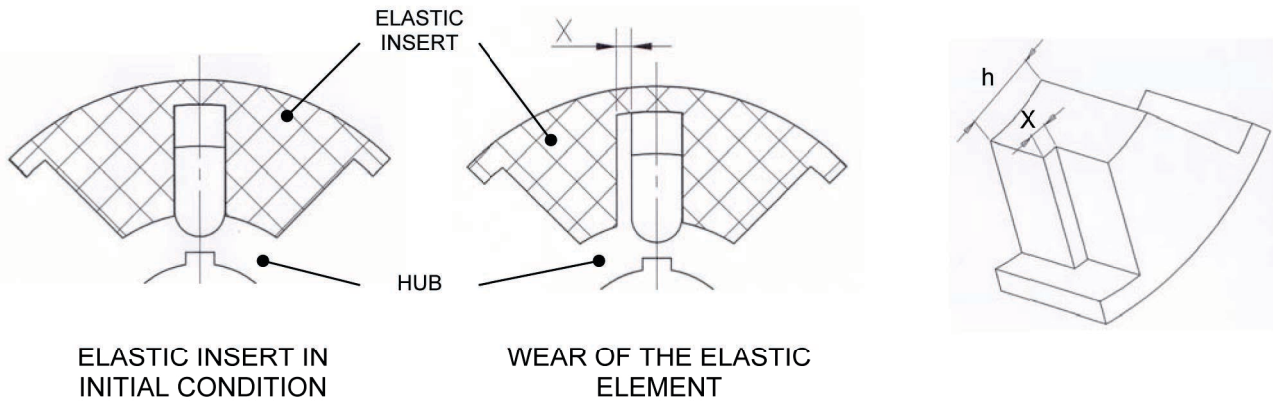
Table 4

FLANGER CAP SCREWS TIGHTENING TORQUES										
TYPE	A1	A2	A3	A4	A45	A5	A55	A6	A7	A8
DIN 912	M6	M6	M8	M8	M10	M10	M10	M10	M12	M14
TQ (Nm.)	14	14	35	35	69	69	69	69	120	205

CONTROL INTERVALS OF THE ELASTIC INSERT

The elastic insert can be inspected easily during a stoppage of the equipment, by displacing the ring axially, once the two attachment setscrews have been removed.

The lifetime of the elastic insert under normal working conditions is 25,000 hours. As a preventive measure, the elastic insert should be checked after the first 3000 hours of operation (see table 3).



APPROXIMATE WEAR AND TEAR VALUES OF THE ELASTIC INSERT

When value X (mm) for wear by friction of the elastic insert reaches the values set out in table 5, it should be replaced with a new one. In the event it is not replaced, the elastic insert could break due to shearing (see figure 3), leaving the equipment switched off on the drive / power side.

Table 5

TYPE	A00	A0	A1	A2	A3	A4	A45	A5	A55	A6	A7	A8	A9	A10	A11
h	7	7	8.5	11	14.5	15	21	22	27	28	36	37.5	42	47	60
X (mm)	1.5	1.5	2.0	2.5	3.0	3.0	4.0	4.5	5.5	6.0	7.5	7.5	8.5	9.5	10

TYPES OF WEAR OF THE ELASTIC INSERT

The different types of wear and tear of the elastic insert are represented in figures 3-4-5-6.

3. Standard wear and tear occurring on the drive side after the lifetime of the elastic insert has passed.
4. Wear occurring on the drive and driven side due to excessive radial misalignment.
5. Total breakage due to shearing on the drive side, caused by a sudden stoppage of the driven side, due to wear over the half-life of the elastic insert, or due to lack of working capacity (the system's torque exceeds the maximum torque admitted by the coupling).
6. Breakage of the elastic insert caused by axial displacement of the drive or driven side. The teeth, by losing surface area in contact with the elastic insert, cause shearing in the zone.

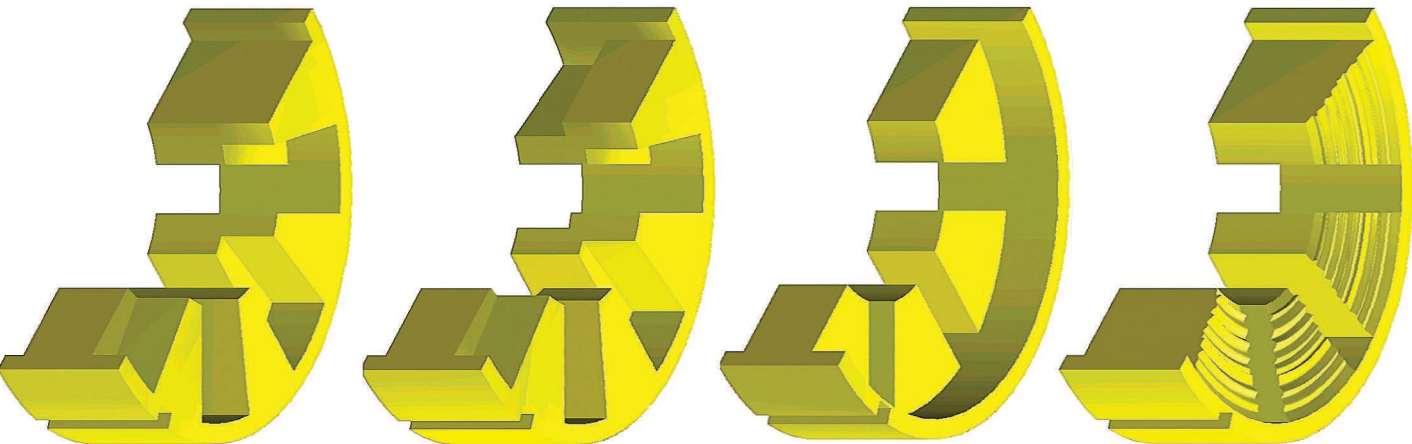
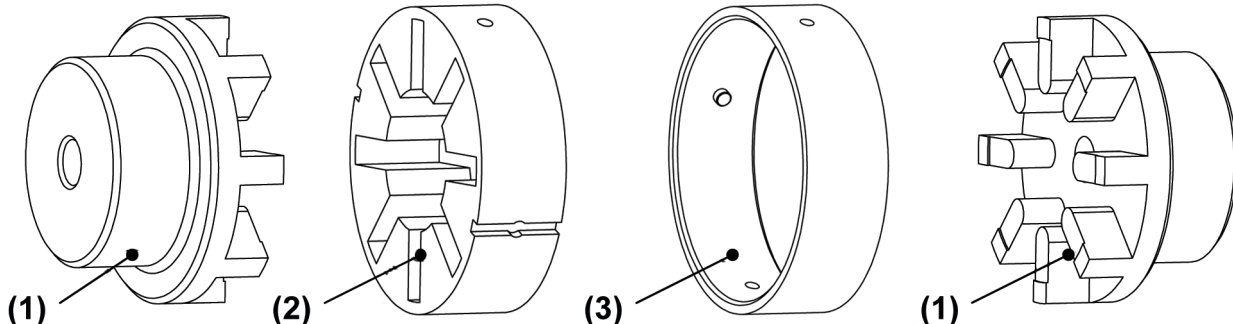


FIGURE 3

FIGURE 4

FIGURE 5

FIGURE 6



TYPE	A00	A0 – A1 – A2 – A3 – A4	A45 – A5 – A55	A6 – A7 – A8 – A9 – A10 – A11
HUB (1)	DURALUMINIO	GG25 GGG40 ACERO F114 INOX AISI 304	GG25 GGG40 ACERO F114	GG25 GGG40
INSERT (2)	POLYURETHANE	POLYURETHANE	POLYURETHANE	POLYURETHANE
RING (3)	STEEL	POLYAMIDE STEEL	STEEL	STEEL

COUPLING MATERIALS ADMISSIBLE IN HAZARDOUS AREAS



explosion group	Permissible coupling materials / TYPE
IIB	Samiflex coupling A0 to A4 with polyamide attachment ring
IIC	Samiflex coupling A0 to A3 with polyamide attachment ring Samiflex coupling A0 to A11 with steel attachment ring

Aluminium as a coupling material is generally excluded for explosive areas.

explosion group	Control intervals for couplings located in hazardous areas Ex
II 2G c IIB T4	The elastic insert should be checked after 3000 hours of operation the first time, or after 6 months at the latest. If insignificant or no wear and tear is observed in the elastic insert following this first inspection, the following inspections can be carried out, provided the operating parameters are the same, after 6000 hours of operation, or after 18 months at the latest, respectively. If considerable wear and tear is observed during the first inspection, so that it would be advisable to change the elastic insert, the cause should be determined, in accordance with the breakdowns table. Maintenance values should be adjusted in line with any modifications to the operating parameters.
II 2G c IIC T4	The elastic insert should be checked after 2000 hours of operation the first time, or after 6 months at the latest. If insignificant or no wear and tear is observed in the elastic insert following this first inspection, the following inspections can be carried out, provided the operating parameters are the same, after 4000 hours of operation, or after 12 months at the latest, respectively. If considerable wear and tear is observed during the first inspection, so that it would be advisable to change the elastic insert, the cause should be determined, in accordance with the breakdowns table. Maintenance values should be adjusted in line with any modifications to the operating parameters.

COUPLING PROTECTION IN HAZARDOUS AREAS

Coupling protection must be fitted with firm metal covers protecting it against falling objects. The distance between the cover and the rotating parts must be at least 5 mm. The cover must be an electrical conductor and be included in the equipotential bonding connection. Bell housing made from aluminium and damping ring (NBR) can be used as connecting elements between the pump and the electric motor, if the magnesium part is below 7.5%. The cover may be removed only after the unit has been stopped.

CAUTION

The equipment (motor) must not be started up without having first fitted (assembled) the attachment ring to the elastic insert, securing it with the two attachment setscrews.

The elastic insert is projected out of the hubs, if the equipment (motor) is started up without the attachment ring having first been fitted (assembled).

Before starting up the coupling, the protective cover must be fitted.

Rotary equipment is potentially dangerous and can cause serious injury.

It is the user's responsibility to provide adequate protection, in compliance with standards for the speed and applications in which are used.

If you notice any irregularities at the coupling during operation, the drive unit must be turned off immediately. The cause of the breakdown must be found out with the table "Breakdowns" and, if possible, be eliminated according to the proposals. The possible breakdowns mentioned can be hints only. To find out the cause all operating factors and machine components must be considered.