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The elastic coupling RINGFEDER® TNM G has in operation a low-maintenance. Reaching the wear limit of the elastic intermediate ring depends on the operating parameters and the conditions of use.

In the case of routine monitoring work on the plant check:

- Alignment of the coupling
- Elastomer state
- Remove dust deposits from the coupling parts and the intermediate ring

### 10.1 Wear Inspection on the Buffer Ring



- **Danger of injuries!**
- **Disconnect the drive before carrying out any work on the coupling!**
- **Secure the drive against unintentional switching on and rotating!**

Perform a visual inspection and a wear inspection of the buffer ring after 2000 hours, or after 3 months at latest, after the first start-up of the equipment. If only minor wear or no wear is observed, further inspections of the plant can be carried out at regular intervals of 4000 hours, however, at least once a year, if the operating modes and conditions of the plant remain unchanged. However, should you observe excessive wear on the occasion of this first inspection already, check whether the cause for the problem is listed in table 5 “Operation faults and possible causes”. In such a case, the inspection intervals must be adapted to the prevailing service conditions.

On the occasion of routine inspections or maintenance work on the drive equipment, or after 3 years at latest:

- Replace the elastic buffer ring.
- If the wear limit has been reached or exceeded, replace the buffer ring immediately, irrespective of the inspection intervals of the equipment.
- Check the alignment of the coupling.
- Remove dust deposits from the coupling components and buffer ring.

## 10.2 Wear limit of elastic buffers

Replace the elastic buffer ring as soon as the coupling has a distinct torsional backlash, or if the minimum buffer thickness ( $PD_{min}$ , Fig. 11) acc. to table 7 has been reached.

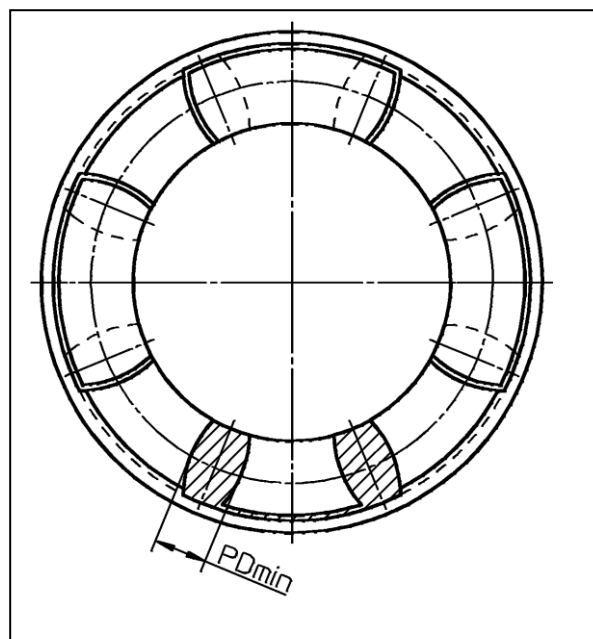


Fig. 11 Buffer thickness

Table 7 Minimum buffer thickness  $PD_{min}$ :

Size	82	97	112	128	148	168	194	214	240	265	295	330	370	415	480	575
$PD_{min}$ [mm]	8	9	9	9	10	10	10	10	11	12	13	14	16	17	17	17

## 10.3 Changing the elastic intermediate ring



- **Injury hazard!**
- **Switch-off the drive before all work on the coupling!**
- **Secure the drive against unintentional switching on and rotating!**

- Remove the holding-down screws on the claw ring and push it back (Figure 12, Pos. 1)
- Cut through the intermediate ring at a connecting joint (Figure 12, Pos. 2)
- Pull out the intermediate ring. Begin at the cut through connecting joint.
- For easier mounting, the new intermediate ring can be provided with a slip additive before introduction (e.g. Talcum powder).
- Cut through the new intermediate ring at a connecting joint and position it between coupling flange and flange hub.

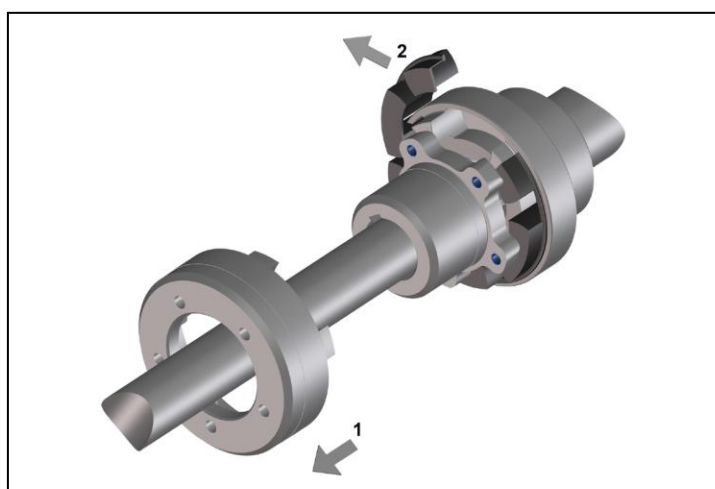


Fig. 12

### Attention!

The bearing surfaces of the claw ring and flange hub must be clean as well as oil and grease-free. Balanced parts are position marked to each other.

- Mount the claw ring into its marked position. When doing this pay attention also that the parts not tilt when being joined to the centering seat.
- Tighten the screws slightly.
- Tighten up the claw ring threaded joints with the tightening torque  $M_A$  stipulated in table 8 (Figure 13).
- Check the alignment of the coupling according to “8 Coupling adjustment”.

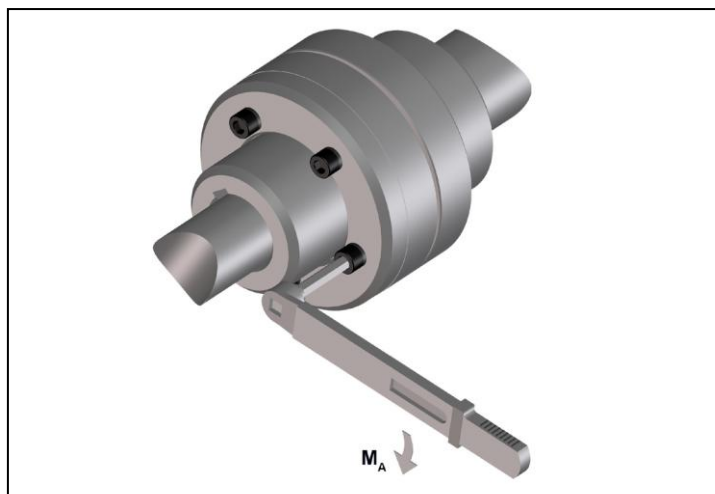


Fig. 13

**Table 8 Tightening torques  $M_A$  for the bolting of the claw ring:**

Size	82	97	112	128	148	168	194	214	240	265	295	330	370	415	480	575
DIN 912- 8.8	M6	M6	M8	M8	M10	M10	M10									
DIN 912-10.9								M12	M12	M14	M14	M16	M16	M16	M20	M20
$M_A$ [Nm]	10	10	25	25	49	49	49	125	125	200	200	310	310	310	610	610

**Observe reduced tightening torques for the bolting of the claw ring if coupling parts are phosphated and oiled!**

Size	82	97	112	128	148	168	194	214	240	265	295	330	370	415	480	575
DIN 912- 8.8	M6	M6	M8	M8	M10	M10	M10									
DIN 912-10.9								M12	M12	M14	M14	M16	M16	M16	M20	M20
$M_A$ [Nm]	8,3	8,3	20	20	40	40	40	100	100	160	160	240	240	240	490	490

### Warning!



- Before commissioning the plant install all protective devices against unintentional touching of free rotating parts.
- To avoid sparks coverings in stainless steel should be used.
- The coverings must fulfil at least the protection type IP2X.
- The covering is to be so designed that it does not deposit dust onto the coupling parts.
- The covering must not touch the coupling or influence it in its functioning.

When using accessories and spare parts which were not originally manufactured by RINGFEDER POWER TRANSMISSION, no liability or guarantee for any damages will be accepted.

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## 11 Waste Disposal

The waste disposal has to occur according to the specific regulations of the respective user country.

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