INSTALLATION AND OPERATING MANUAL

COUPLING Rotoelastic

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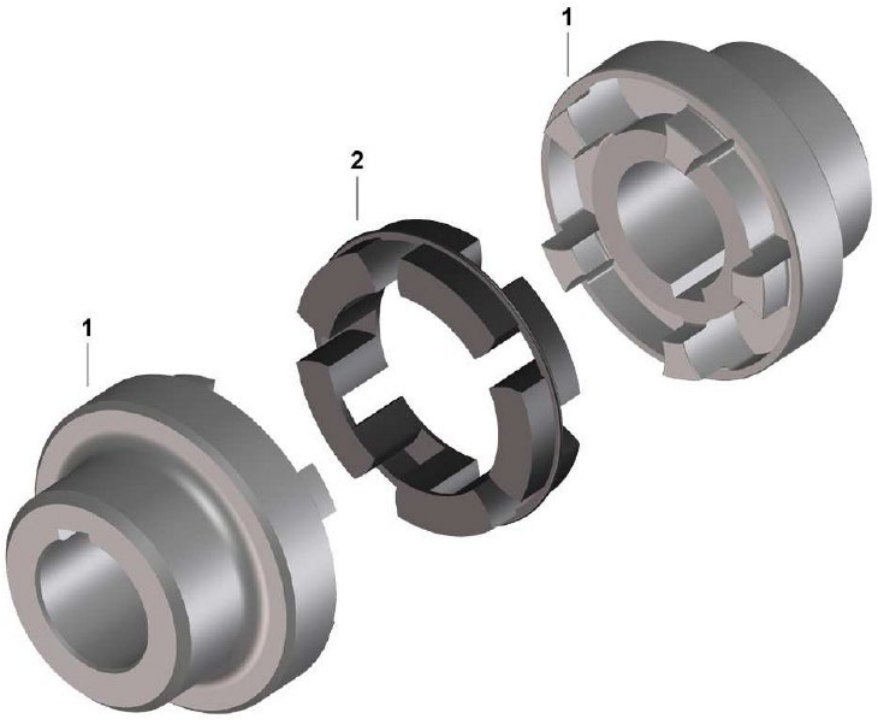
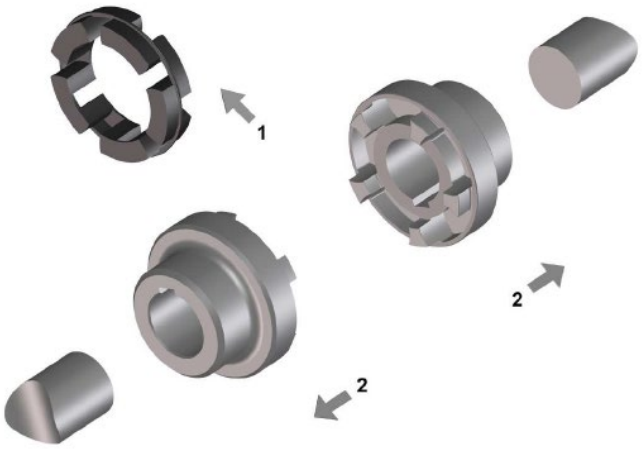
1) Coupling component

Coupling hubs (1)
Elastic element (2)



2) Coupling installation

- Remove the elastic element
- Clean the boreholes of the coupling hubs and the shafts end before the installation. The surfaces must be clean, dry and grease-free.
- For larger couplings use suitable mounting tools and hoisting devices such as cranes or pulley blocks.
- Mount the coupling hubs in the proper position on the shafts end



(fig. 3)

- Mount the hubs in such a manner that the shaft end is flush with the inner bore opening. (fig. 4)
- Secure possible available setscrews, by tightening with an adhesive e.g. Loctite 222 against automatic loosening and flying out.

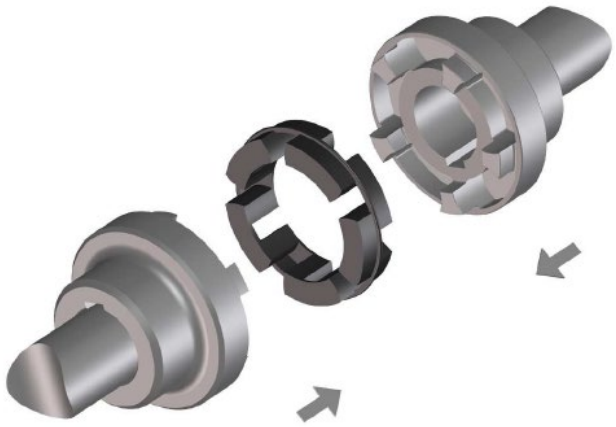
fig. 4

Note:

To facilitate mounting the, the hub can be uniformly heated to 80°C to 100°C.

Warning: Always wear heat-resistant gloves to protect yourself against injuries due to hot coupling components!

- For easier mounting, the elastic intermediate ring can be provided with a slip additive (e.g. Talcum) before introduction
- Fit the intermediate ring into one half of the coupling.
- Push the shaft with the mounted half coupling (usually motor shaft) close to the other (fig 5).
- Adjust the coupling according to the following specifications (3) "Coupling alignment"

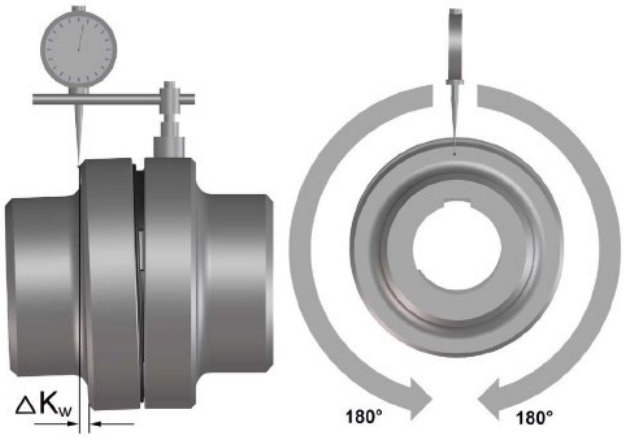


(fig 5)

3) Coupling alignment ΔK_w

a) Angular misalignment

- Measure on the face of the external diameter a complete rotation (360°). Determine in this case the greatest deviation $\Delta K_{w\,1}$ (min) and $\Delta K_{w\,2}$ (max) Find the angular misalignment as $\Delta K_{w\,1} - \Delta K_{w\,2} = \Delta K_w$ (fig. 6)
- Compare the obtained value with the Tab. 1, data valid up to 1500 rpm.



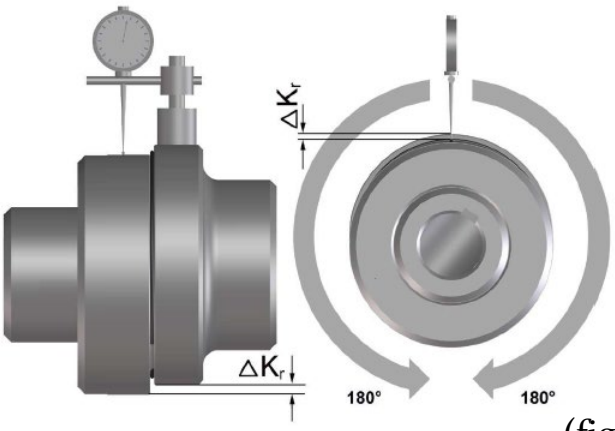
(fig. 6)

tab. 1. *Angular misalignment max value.

Size	82	97	112	128	148	168	194	214
$\Delta K_{w\ max}$ (mm)	1,7	2	2	2,2	2,6	2,9	3,3	3,7

b) Radial/Parallel misalignment

- Rotating the coupling of 360° determinate the displacement between $\Delta K_{r\,1}$ e $\Delta K_{r\,2}$ (fig. 7)
- Calculate the max angular misalignment $\Delta K_r = 0{,}5 \times (\Delta K_{r\,1} - \Delta K_{r\,2})$ Compare the obtained value with Tab. 2, data valid up to 1500 rpm.



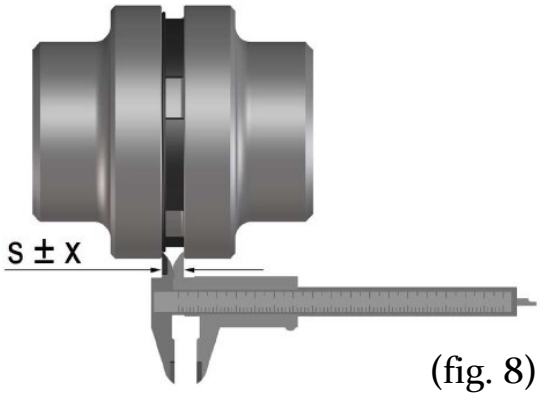
(fig. 7)

tab. 2. * Radial misalignment max value

Size	82	97	112	128	148	168	194	214
$\Delta K_{w\ max}$ (mm)	0,2	0,2	0,3	0,3	0,3	0,3	0,3	0,3

c) Axial misalignment

- Measure the axial gap as indicate on (fig. 8)
- Compare the quota "S" measured with the indicate value on tab. 3



(fig. 8)

tab. 3. * Max axial misalignment.

Size	82	97	112	128	148	168	194	214
S(mm)	3±1	3±1	3,5±1	3,5±1	3,5±1	3,5±1,5	4±1,5	4±1,5

* ATTENTION: the values indicated are maximum with the others at zero

4)Coupling maintenance

The elastic coupling ROTOELASTIC 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.

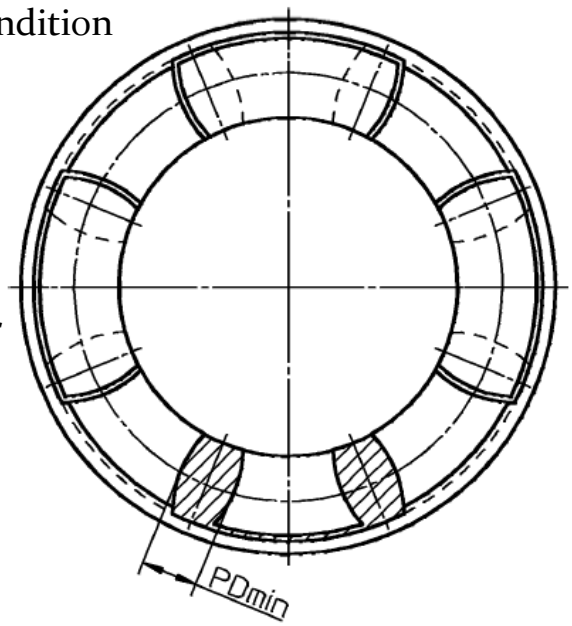
In the case of routine monitoring work on the plant check:

- Coupling alignment, refer to point 3
- Elastomer wear state.
- Remove dust deposits from the coupling parts and the intermediate ring

a) Control and valuation of the elastic element condition

- Visually inspect.
  In presence of cracks and or signs of aging, replace the elastic element.
- Wear limit of elastic element
  Replace the elastic buffer ring as soon as the coupling has a distinct torsional backlash, or if the minimum buffer thickness (PDmin, fig. 9) acc. to table 4 has been reached.

(fig. 9

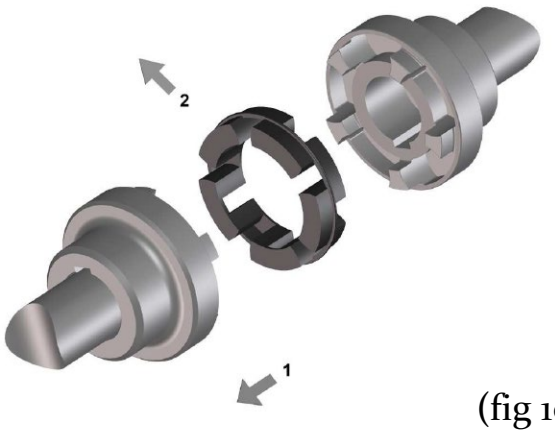


tab. 4. Elastic element minimum thickness PDmin

Size	82	97	112	128	148	168	194	214
PD min (mm)	8	9	9	10	10	10	10	11

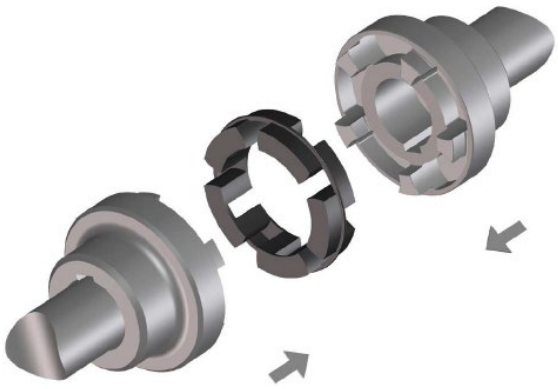
b) Elastic element replace

- Slip back the shaft with the hub on it (usually motor shaft) (fig. 10 p.1)
- Remove the old elastic element (fig. 10 p.2)



(fig 10)

- Insert the new elastic element in its place
  For easier mounting, the elastic intermediate ring can be provided with a slip additive (e.g. Talcum) before introduction
- Reposition the shaft on its place
  Align the coupling again following the Indication of cap. 3 “Coupling alignment”



5) Inspection time

Perform a visual inspection and wear test of the elastic element after 2000 hours, or after 3 months after the first start-up. If no, or just a slight wear, is detected, schedule regular check intervals of 4000 hours. However, at least one check is recommended once a year. These indications are only valid if the mode and operating conditions remain unchanged.

6) Waste disposal

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

7) Responsibility

This article should only be used for the functions for which it has been designed, in accordance with the standard safety parameters, considering the parameters of choice, use, assembly, alignment, control and maintenance, indicated in the respective technical catalogue and in the present assembly and maintenance instructions. Otherwise WESTCAR considered itself t any liability.