

KTR-N 49610 E sheet: 1 edition: 4

The **POLY** is a torsionally elastic claw coupling. It is able to compensate offset of shafts, e. g. caused by manufacturing inaccuracies, thermal expansion etc., in case of low shaft distance dimension.

Table of Contents

1 **Technical Data**

2 **Hints**

- 2.1 **General Hints**
- 2.2 Safety and Advice Hints
- 2.3 General Hints to Danger
- 2.4 Proper Use

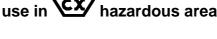
3 **Storage**

4 **Assembly**

- Components of the Couplings
- 4.2 Hint regarding the finish bore
- 4.3 Assembly of the Coupling
- 4.4 Displacements Alignment of the Couplings

5 **Enclosure A**

Hints and instructions regarding the use in (ξx) hazardous areas



- Selection of the Coupling Size
- 5.2 Control intervals for couplings in hazardous areas
- Approximate values of wear
- Permissible coupling materials in the
- Marking of coupling for the hazardous area 5.5
- 5.6 Starting
- 5.7 Breakdowns, causes and elimination
- Certificate of Conformity according to the EG Standards 94/9/EG dated 23 March 1994

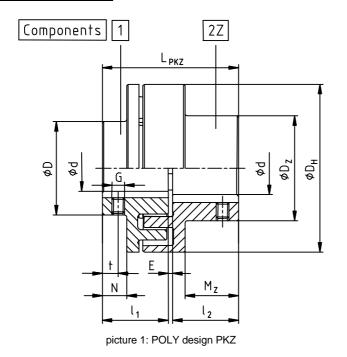
Urheberschutz	Gezeichnet:	17.01.03 Sha/At	Ersatz für:	KTR-N v. 12.08.02				Vert	eiler		
gemäß DIN 34	Geprüft:	17.01.03 Sha	Ersetzt durch:		W	K	V	VA		М	KC

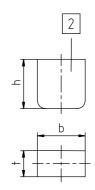


KTR-N 49610 E

sheet: 2 edition: 4

1 Technical Data





picture 2: Poly - elastomer packages NBR (buna N) 92 ShA

Components:

- 1 cam part
- 2Z pocket section (preferably to be used at the driving end)

Table 1: dimensions design PKZ

	finish	bore						dimensi	ons [mm]				
POLY	$d_{\text{max.}}$	[mm]				gen	eral					thread of	setscrews
size	compo- nent 1	compo- nent 2Z	D _H	D	Dz	l ₁ , l ₂	Mz	N	Е	L _{PKZ}	G	t	tightening torque T _A [Nm]
8	20	28	86	43	50	35	26	3	3	73	M5	18	2
9	28	38	97	55	65	40,5	30	7	3	84	M8	23	10
10	32	42	107	60	70	45	35	10	4	94	M8	27	10
12	35	48	131	70	80	55	43	11	4	114	M8	30	10
14	44	55	142	80	93	60	46	17	4	124	M8	10	10
15	50	60	157	90	100	65	52	21	4	134	M8	15	10
17	60	65	176	100	110	70	56	26	4	144	M8	15	10
19	75	75	195	125	125	75	63	27	4	154	M8	15	10
20	65	75	205	115	127	80	65	22	4	164	M8	15	10
22	85	85	224	140	140	90	75	38	4	184	M10	20	17
25	90	90	257	150	150	100	84	43	5	205	M12	20	40
28	100	100	288	165	165	110	90	44	5	225	M12	20	40
30	110	110	308	180	180	130	108	58	5	265	M16	20	80

Table 2: torque and speed

POLY siz	е	8	9	10	12	14	15	17	19	20	22	25	28	30
torque	T_{KN}	42	72	100	170	210	320	400	660	820	1100	1600	2500	3950
[Nm]	T _{Kmax.}	84	144	200	340	420	640	800	1320	1640	2200	3200	5000	7900
max. speed n [1	/min.] ¹⁾	5000	5000	5000	5000	4800	4300	3800	3500	3300	3000	2700	2350	2200

¹⁾ For peripheral speeds of more than v=30 m/sec a dynamical balancing is necessary.

Table 3: dimensions elastomer packages

coupling s	ize	8	9	10	12	14	15	17	19	20	22	25	28	30
quantity of the pa	ickages 2)	8	10	10	10	10	12	12	12	12	16	16	16	16
packages s	size		1		2	2	(3	3a	4	3b	4	5	6
dimensions	h		18,9		23	3,9	24	ŀ,6	26,8	34,6	29,6	34,6	40,6	42,4
dimensions	b		18,4		24	1,9	27	7,2	27,7	34,9	29,6	34,9	40,0	43,7
[mm]	t		10,0	<u> </u>	15	5,3	16	5,1	18,4	19,6	18,4	19,6	22,2	23,7

²⁾ Quantity for the complete coupling.

Urheberschutz	Gezeichnet:	17.01.03 Sha/At	Ersatz für:	KTR-N v. 12.08.02				Vert	eiler		
gemäß DIN 34	Geprüft:	17.01.03 Sha	Ersetzt durch:		W	K	٧	VA		М	KC



KTR-N 49610 E sheet: 3 edition: 4

1 Technical Data



CAUTION!

For a continuous and troublefree operation of the coupling it must be designed according to the selection instructions (according to DIN 740 part 2) for the particular application (see POLY® catalogue).

If the operating conditions (performance, speed, changes at engine and machine) change, the coupling selection must be checked again.

2 Hints

2.1 General Hints

Please read through these mounting instructions carefully before you set the coupling into operation.



The POLY® coupling is approved for the use in hazardous areas.

When using the coupling in hazardous areas please observe the special hints and instructions regarding safety in enclosure A.

Please pay special attention to the safety instructions!

The mounting instructions are part of your product. Please keep them carefully and close to the coupling.

The copyright for these mounting instructions remains with KTR Kupplungstechnik GmbH.

2.2 Safety and Advice Hints



DANGER! Danger of injury to persons.



CAUTION! Damages on the machine possible.



ATTENTION! Pointing to important items.



PRECAUTION! Hints concerning explosion protection.

2.3 General Hints of Danger

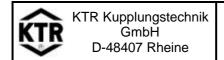


DANGER!

With assembly, operation and maintenance of the coupling it has to be made sure that the entire drive train is protected against unintentional engagement. You can be seriously hurt by rotating parts. Please make absolutely sure to read through and observe the following safety instructions.

- All operations on and with the coupling have to be performed taking into account "safety first".
- Please make sure to disengage the power pack before you perform your work.
- Protect the power pack against unintentional engagement, e. g. by providing hints at the place of engagement or removing the fuse for current supply.
- Do not touch the operation area of the coupling as long as it is in operation.
- Please protect the coupling against unintentional touch. Please provide for the necessary protection devices and caps.

Urheberschutz	Gezeichnet:	17.01.03 Sha/At	Ersatz für:	KTR-N v. 12.08.02				Vert	eiler		
gemäß DIN 34	Geprüft:	17.01.03 Sha	Ersetzt durch:		W	K	٧	VA		М	KC



KTR-N 49610 E sheet: 4 edition: 4

2 Hints

2.4 Proper Use

You may only assemble, operate and maintain the coupling if you

- carefully read through the mounting instructions and understood them
- · had technical training
- are authorized to do so by your company

The coupling may only be used in accordance with the technical data (see table 1 to 3 in chapter 1). Unauthorized modifications on the coupling design are not admissible. We do not take any warranty for resulting damages. To further develop the product we reserve the right for technical modifications.

The **POLY**[®] **coupling** described in here corresponds to the technical status at the time of printing of these mounting instructions.

3 Storage

The coupling hubs are supplied in preserved condition and can be stored at a dry and roofed place for 6 - 9 months.

The features of the elastomer packages remain unchanged for up to 5 years in case of favourable stock conditions.



CAUTION!

The storage rooms may not include any ozone-generating devices, like e. g. fluorescent light sources, mercury-vapour lamps or electrical high-voltage appliances. Humid storage rooms are not suitable.

Please make sure that there is no condensation. The best relative air humidity is under 65%.

4 Assembly

Basically the coupling is supplied in individual parts. Before assembly the coupling has to be controlled for completeness.

Urheberschutz	Gezeichnet:	17.01.03 Sha/At	Ersatz für:	KTR-N v. 12.08.02				Vert	eiler		
gemäß DIN 34	Geprüft:	17.01.03 Sha	Ersetzt durch:		W	K	٧	VA		М	KC

KTR-N 49610 E

sheet: 5 edition: 4

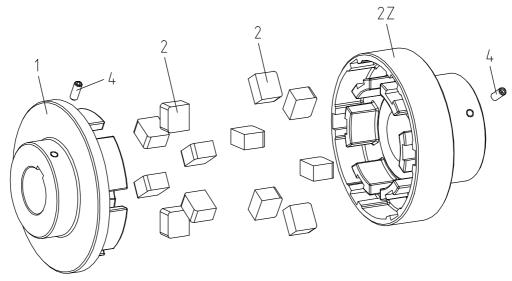
4 Assembly

4.1 Components of the Couplings

Components of POLY design PKZ

Component	Quantity	Designation	Material	Balancing Condition
1	1	cam part	EN-GJL-250	1)
2	see table 4	elastomer packages	NBR (buna N) 92 ShA	
2Z	1	pocket section	EN-GJL-250	1)
4	2	setscrew DIN 916	steel	

¹⁾ acc. to customer's request



picture 3: POLY design PKZ

Table 4:

coupling size	8	9	10	12	14	15	17	19	20	22	25	28	30
quantity of packages 1)	8	10	10	10	10	12	12	12	12	16	16	16	16
package size		1		2	2	9	3	3a	4	3b	4	5	6

¹⁾ Quantity for the complete coupling (dimensions see table 3).

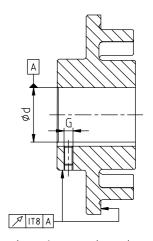
4.2 Hint regarding the finish bore



DANGER!

The maximum permissible bore diameters d (see table 1 in chapter 1 - Technical Data) must not be exceeded. If these figures are disregarded, the coupling may tear. Rotating particles may cause serious danger.

- Hub bores machined by the customer have to observe concentric running or axial running, respectively (see picture 4).
- Please make absolutely sure to observe the figures for d_{max}.
- Carefully align the hubs when the finish bores are brought in.
- Please provide for a setscrew or an end plate for the axial fastening of the hubs.



picture 4: concentric running and axial running

Urheberschutz	Gezeichnet:	17.01.03 Sha/At	Ersatz für:	KTR-N v. 12.08.02				Vert	eiler		
gemäß DIN 34	Geprüft:	17.01.03 Sha	Ersetzt durch:		W	K	٧	VA		М	KC



KTR-N 49610 E sheet: 6 edition: 4

4 Assembly

4.3 Assembly of the Hubs



ATTENTION!

We recommend to check bores, shaft, keyway and feather key for dimensional accuracy before assembly.

Heating the hubs slightly (approx. 80 °C) allows for an easier installation onto the shaft.



PRECAUTION!

Please pay attention to the danger of ignition in hazardous areas.



DANGER!

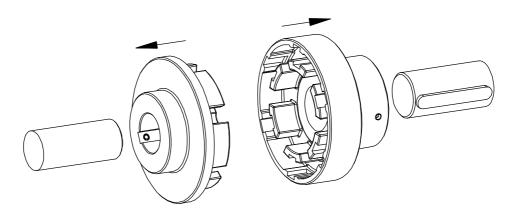
Touching the heated hubs causes burns. We would recommend to wear safety gloves.



CAUTION!

During the assembly please make sure that the E dimension (see table 1) is observed, so that the parts do not conact each other during the operation. Disregarding this hint may cause damage on the coupling.

- Assemble the cam and the pocket section onto the shaft of the drive and the driven side (see picture 5).
- Insert the elastomer packages into the cam and the pocket section (see picture 6).
- Only valid for the cam section size 8 to 12!
 Fasten the cam part by tightening the setscrews DIN 916 with cup point (tightening torque see table 1).
- Move the power packs in axial direction until the dimension E is achieved (see picture 7).
- If the power packs are already firmly assembled, axial movement of the cam part or pocket section on the shafts allows for adjusting the dimension E (see picture 7).
- Fasten the cam part or pocket section by tightening the setscrews DIN 916 with cup point.



picture 5: assembly cam part and pocket section

Urheberschutz	Gezeichnet:	17.01.03 Sha/At	Ersatz für:	KTR-N v. 12.08.02				Verte	eiler		
gemäß DIN 34	Geprüft:	17.01.03 Sha	Ersetzt durch:		W	K	٧	VA		М	KC



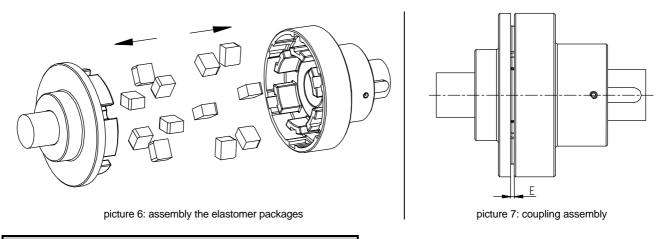
KTR-N 49610 E sheet: 7

4

edition:

4 Assembly

4.3 Assembly of the Hubs



4.4 Displacements - Alignment of the Couplings

The displacement figures shown in table 5 offer sufficient safety to compensate for environmental influences like, for example, heat expansion or lowering of foundation.



CAUTION!

In order to ensure a long lifetime of the coupling and to avoid dangers regarding the use in hazardous areas, the shaft ends must be accurately aligned.

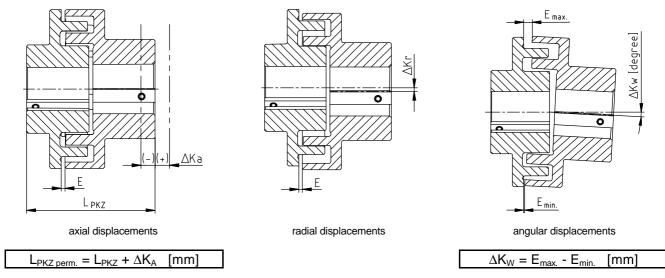


Please absolutely observe the displacement figures indicated (see table 5). If the figures are exceeded, the coupling is damaged.

In case of a use in hazardous areas for the explosion group IIC (marking II 2G c IIC T4) only the half displacement figures (see table 5) are permissible.

Please note:

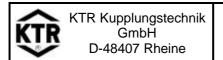
Please check with a dial gauge, ruler or feeler whether the permissible displacement figures of table 5 can be
observed.



picture 8: displacements

The radial and angular displacements can occur simultaneously. The sum $V = \Delta Kr + (E_{max.} - E_{min.})$ shall not exceed the values in table 5.

Urheber	rschutz	Gezeichnet:	17.01.03 Sha/At	Ersatz für:	KTR-N v. 12.08.02				Vert	eiler		
gemäß	DIN 34	Geprüft:	17.01.03 Sha	Ersetzt durch:		W	K	٧	VA		М	KC



KTR-N 49610 E

sheet: 8 edition: 4

4 Assembly

4.4 Displacements - Alignment of the Couplings

Example for the misalignment combinations given in picture 9:

Example 1:

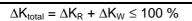
 $\Delta K_R = 30\%$

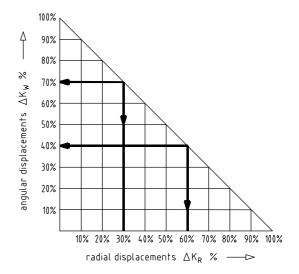
 $\Delta K_W = 70\%$

Example 2:

 $\Delta K_R = 60\%$

 $\Delta K_W = 40\%$





picture 9: combinations of displacement

Table 5: displacement figures

coupling size	ze	8	9	10	12	14	15	17	19	20	22	25	28	30
max. axial displacemer	nt ∆Ka [mm]	±1	±1	±1	±2	±2	±2	±2	±2	±2	±2	±2	±2	±2
max. radial displace- ment ΔKr [mm]	n= bis 750 1/min	0,8	0,8	0,8	0,8	0,8	1,0	1,0	1,0	1,0	1,0	1,0	1,0	1,2
or max. angular displace-	n=1000 1/min	0,7	0,7	0,7	0,7	0,7	0,9	0,9	0,9	0,9	0,9	0,9	0,9	1,1
ment ΔKw [mm]	n=1500 1/min	0,5	0,5	0,5	0,5	0,5	0,7	0,7	0,7	0,7	0,7	0,7	0,7	0,7
or sum V	n=3000 1/min	0,3	0,3	0,3	0,3	0,3	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5

Urheberschutz	Gezeichnet:	17.01.03 Sha/At	Ersatz für:	KTR-N v. 12.08.02				Vert	eiler		
gemäß DIN 34	Geprüft:	17.01.03 Sha	Ersetzt durch:		W	K	٧	VA		М	KC



KTR-N 49610 E

sheet: 9 edition: 4

5 Enclosure A

design PKZ:

Hints and instructions regarding the use in

hazardous areas

5.1 Selection of the Coupling Size

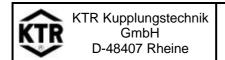
If the coupling is used in explosion proof areas, the size must be selected in a way that there is a minimum safety of s = 2.0 from the unit torque to the nominal torque of the coupling.

5.2 Control intervals for couplings in hazardous areas

cam part / elastomer packages / pocket section

explosion group	control intervals
II 2G c IIB T4	The torsional backlash of the coupling (see chapter 5.3) according to Guideline 94/9/EG (ATEX 95) must only be controlled if a friction of the elastomer packages (part 2) and consequently a machine down-time of the drive leads to explosion hazard. A preventive checking of torsional backlash is recommended. A checking of the circumferential backlash and a visual check of the elastomer packages must be effected after 3000 operating hours for the first time, after 6 months at the latest. If you note an unconsiderable or no wear at the elastomer packages after this first inspection, the further inspections can be effected, in case of the same operating parameters, respectively after 6000 operating hours or after 18 months at the latest. If you note a considerable wear during the first inspection, so that a change of the elastomer packages would be recommended, please find out the cause according to the table "Breakdowns", as far as possible. The maintenance intervals must be adjusted according to the changed operating parameters.
II 2G c IIC T4	The torsional backlash of the coupling (see chapter 5.3) according to Guideline 94/9/EG (ATEX 95) must only be controlled if a friction of the elastomer packages (part 2) and consequently a machine down-time of the drive leads to explosion hazard. A preventive checking of torsional backlash is recommended. A checking of the circumferential backlash and a visual check of the elastomer packages must be effected after 2000 operating hours for the first time, after 3 months at the latest. If you note an unconsiderable or no wear at the elastomer packages after this first inspection, the further inspections can be effected, in case of the same operating parameters, respectively after 4000 operating hours or after 12 months at the latest. If you note a considerable wear during the first inspection, so that a change of the elastomer packages would be recommended, please find out the cause according to the table "Breakdowns", as far as possible. The maintenance intervals must be adjusted according to the changed operating parameters.

Urheberschutz	Gezeichnet:	17.01.03 Sha/At	Ersatz für:	KTR-N v. 12.08.02				Verte	eiler		
gemäß DIN 34	Geprüft:	17.01.03 Sha	Ersetzt durch:		W	K	٧	VA		М	KC



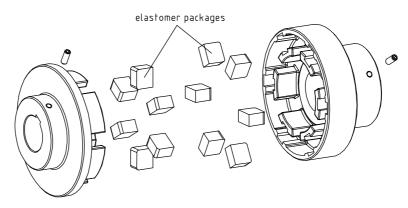
KTR-N 49610 E sheet: 10 edition: 4

5 Enclosure A

Hints and instructions regarding the use in







picture 10: POLY design PKZ

Checking of torsional backlash

Here the backlash between coupling cams and the elastomer packages must be checked by reverse backlash. The friction / wear may be 20% of the original thickness of the elastomer package before exchanging the elastomer packages. After having reached the limit of wear Δs_{max} the elastomer packages must be exchanged immediately, irrespective of the inspection intervals.

5.3 Approximate values of wear

The reaching of the exchange values depends on the operating conditions and the existing operating parameters.

If the torsional backlash is $\geq \Delta s_{max.}$ in mm, the elastomer packages must be exchanged. Friction of $\geq 20\%$ of the original thickness of the elastomer package - exchange necessary!



CAUTION!

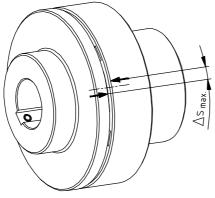
When changing the elastomer packages please do only use packages with the same Shore hardness.



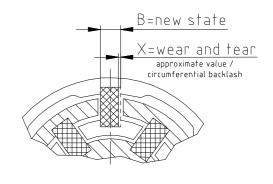
CAUTION!

In order to ensure a long lifetime of the coupling and to avoid dangers regarding the use in hazardous areas, the shaft ends must be accurately aligned.

Please absolutely observe the displacement figures indicated (see table 5). If the figures are exceeded, the coupling is damaged.



picture 11: checking of the limit of wear



picture 12: wear of elastomer packages

Urheberschutz	Gezeichnet:	17.01.03 Sha/At	Ersatz für:	KTR-N v. 12.08.02				Verte	eiler		
gemäß DIN 34	Geprüft:	17.01.03 Sha	Ersetzt durch:		W	K	٧	VA		М	KC



KTR-N 49610 E sheet: 11

4

edition:

5 Enclosure A

Hints and instructions regarding the use in



5.3 Approximate values of wear

Table 6: limits of wear

POLY	S	tandard design			with low backla elastomer pack	
size	thickness of elastomer packages [mm]	friction X _{max.} [mm]	torsional backlash Δs _{max.} [mm]	thickness of elastomer packages [mm]	friction X _{max.} [mm]	torsional backlash Δs _{max.} [mm]
8	10,0	2,0	5,0	11,8	2,4	3,6
9	10,0	2,0	5,1	11,8	2,4	3,5
10	10,0	2,0	5,3	11,8	2,4	3,5
12	15,3	3,0	7,5	17,5	3,5	5,2
14	15,3	3,0	7,7	17,5	3,5	5,2
15	16,1	3,0	8,2	18,7	3,8	5,5
17	16,1	3,0	8,7	18,7	3,8	5,5
19	18,4	3,5	9,7	=	•	-
20	19,6	4,0	10,3	22,9	4,6	6,7
22	18,4	3,5	10,3	-	ı	-
25	19,6	4,0	9,4	22,9	4,6	6,8
28	22,2	4,0	10,6	23,9	4,8	7,3
30	23,7	4,5	11,3	28,6	5,7	8,4

5.4 Permissible coupling materials in the hazardous area

In the explosion groups **IIB** and **IIC** only the following material combinations may be used:

EN-GJL-250 - EN-GJL-250 (old designation GG 25) EN-GJS-400-15 - EN-GJS-400-15 (old designation GGG 40)

steel - steel

stainless steel - stainless steel

Aluminium as coupling material is generally excluded for the explosion area.



Couplings for the use in hazardous areas are marked for the respectively permissible conditions of use. Explosion group IIC:

e. g. II 2G IIC T4

In the marking II 2G c IIC T4 the explosion group IIB is included.

Urheberschutz	Gezeichnet:	17.01.03 Sha/At	Ersatz für:	KTR-N v. 12.08.02				Verte	eiler		
gemäß DIN 34	Geprüft:	17.01.03 Sha	Ersetzt durch:		W	K	٧	VA		М	KC



KTR-N 49610 E sheet: 12 edition: 4

5 Enclosure A

Hints and instructions regarding the use in



5.6 Starting

Before putting the coupling into operation, check the tightness of the setscrews in the cam part or pocket section, the alignment and the distance dimension E and correct, if necessary, and also check all screw connections regarding the stipulated tightening torques dependent on the type of coupling.



If used in hazardous areas, the setscrews must be additionally secured against self-loosening to fix the cam part and pocket section, e. g. with Loctite (medium strength).

Last but not least, the coupling protection against unintended contact must be fixed.



Coupling protection in the hazardous area.

Covering of the coupling

The couplings must be provided with firm coverings (*if possible, made from stainless steel*) protecting the couplings against falling objects. There can be regular openings in the coverings which may not exceed the following dimensions:

	circular openings diameter in mm	rectangular openings side length in mm
top surface of the covering	4	4
side parts of the covering	8	8

The distance between the cover and the rotating parts must be at least 5 mm.

The cover must be electrically conductive and be included in the equipotential bonding. Bellhousings made from aluminium and damping rings (NBR) can be used as connecting element between pump and electro motor if the magnesium part is below 7,5 %. The cover may only be taken off after having stopped the unit.

During operation, please pay attention to

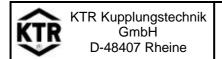
- strange running noises
- · occurring vibrations.



CAUTION!

If you note 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.

Urheber	rschutz	Gezeichnet:	17.01.03 Sha/At	Ersatz für:	KTR-N v. 12.08.02				Vert	eiler		
gemäß	DIN 34	Geprüft:	17.01.03 Sha	Ersetzt durch:		W	K	٧	VA		М	KC



KTR-N 49610 E sheet: 13 edition: 4

5 Enclosure A

Hints and instructions regarding the use in



5.7 Breakdowns, Causes and Elimination

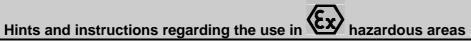
breakdowns	causes	danger hints for hazardous areas	elimination
	misalignment	danger of ignition due to sparking	put the unit out of operation eliminate the reason for the misalignment (e. g. loose foundation bolts, break of the engine fixing, heat expansion of unit components, change of the assembly dimension E of the coupling) check coupling parts and exchange damaged coupling parts checking of wear see under point Control
change of the running noises and / or occurring vibrations	wear of elastomer package, low / no torque transmission since coupling cams slip through	danger of ignition due to hot surfaces	 put the unit out of operation disassemble the coupling and remove rests of the elastomer packages check coupling parts and exchange damaged coupling parts insert elastomer packages, assemble coupling parts check alignment, correct if necessary
	loose screws for axial securement of hubs	danger of ignition due to sparking	 put the unit out of operation check alignment of coupling tighten the screws to secure the hubs and secure against self-loosening check coupling parts and exchange damaged coupling parts checking of wear see under point Control
failure of the elastomer	break of the elastomer packages due to high shock energy / overload, coupling cams slip through	danger of ignition due to hot surfaces	 put the unit out of operation disassemble the coupling and remove rests of the elastomer packages check coupling parts and exchange damaged coupling parts insert elastomer packages, assemble coupling parts find out the reason of overload
packages	operating parameters do not correspond to the coupling performance / coupling cams slip through	danger of ignition due to hot surfaces	 put the unit out of operation check the operating parameters and select a larger coupling (consider installation space) assemble new coupling size check alignment

Urheberschutz	Gezeichnet:	17.01.03 Sha/At	Ersatz für:	KTR-N v. 12.08.02				Vert	eiler		
gemäß DIN 34	Geprüft:	17.01.03 Sha	Ersetzt durch:		W	K	٧	VA		М	KC



KTR-N 49610 E sheet: 14 edition: 4

5 Enclosure A



5.7 Breakdowns, Causes and Elimination

breakdowns	causes	danger hints for hazardous areas	elimination
failure of the elastomer packages	mistake in service of the unit / coupling cams slip through	danger of ignition due to hot surfaces	 put the unit out of operation disassemble the coupling and remove rests of the elastomer packages check coupling parts and exchange damaged coupling parts insert elastomer packages, assemble coupling parts instruct and train the service staff
	misalignment		put the unit out of operation eliminate the reason for the misalignment (e. g. loose foundation bolts, break of the engine fixing, heat expansion of unit components, change of the assembly dimension E of the coupling) check coupling parts and exchange damaged coupling parts checking of wear see under point Control
premature wear of elastomer packages	e. g. contact with aggressive liquids / oils, ozone-influence, too high ambient temperatures etc. effecting a physical change of the elastomer packages		 put the unit out of operation disassemble the coupling and remove rests of the elastomer packages check coupling parts and exchange damaged coupling parts insert elastomer packages, assemble coupling parts check alignment, correct if necessary make sure that further physical changes of the spider are excluded
	ambient / contact temperatures which are too high for the elastomer packages, max. permissible -20 °C / +80 °C	danger of ignition due to hot surfaces	 put the unit out of operation disassemble the coupling and remove rests of the elastomer packages check coupling parts and exchange damaged coupling parts insert elastomer packages, assemble coupling parts check alignment, correct if necessary check and regulate ambient / contact temperature

Urheberschutz	Gezeichnet:	17.01.03 Sha/At	Ersatz für:	KTR-N v. 12.08.02	Verteiler							
gemäß DIN 34	Geprüft:	17.01.03 Sha	Ersetzt durch:		W	K	٧	VA			М	KC



KTR-N 49610 E sheet: 15 edition: 4

5 Enclosure A

Hints and instructions regarding the use in



5.7 Breakdowns, Causes and Elimination

breakdowns	causes	danger hints for hazardous areas	elimination						
premature wear of elastomer packages (liquefaction of material inside the elastomer packages cam)	drive vibrations	danger of ignition due to hot surfaces	 put the unit out of operation disassemble the coupling and remove rests of the elastomer packages check coupling parts and exchange damaged coupling parts insert elastomer packages, assemble coupling parts check alignment, correct if necessary find out the reason for the vibrations 						
break of cams or hubs	blockade due to destroyed elastomer packages	danger of ignition due to sparking	 put the unit out of operation change complete coupling check alignment determine the cause, remove the mistakes 						

ATTENTION!

KTR does not assume any liabilities or guarantees regarding the use of spare parts and accessories which are not provided by KTR and for the damages resulting herefrom.

Urheberschutz	Gezeichnet:	17.01.03 Sha/At	Ersatz für:	KTR-N v. 12.08.02	Verteiler							
gemäß DIN 34	Geprüft:	17.01.03 Sha	Ersetzt durch:		W	K	٧	VA			М	KC



KTR-N 49610 E sheet: 16

4

edition:

5 Enclosure A

Hints and instructions regarding the use in



hazardous areas

5.8 Certificate of Conformity

Certificate of Conformity

corresponding to EG Standard 94/9/EG dated 23 March 1994 and to the legal regulations

The manufacturer - KTR Kupplungstechnik GmbH, D-48432 Rheine - states that the

POLY couplings

described in these mounting instructions and explosion-proof designed correspond to Article 1 (3) b) of Standard 94/9/EG and comply with the general Safety and Health Requirements according to enclosure II of Standard 94/9/EG.

The couplings are certified according to Type Examination Certificate IBExU02ATEXB007 X.

According to article 8 (1) of Standard 94/9/EG the technical documentation is deposited with the:

IBExU

Institut für Sicherheitstechnik GmbH

Fuchsmühlenweg 7

09599 Freiberg

Rheine,

12.08.02

Date

Dr. Norbert Partmann

Engineering Manager

Bernd Tenfelde Product Manager

Urheberschutz	Gezeichnet:	17.01.03 Sha/At	Ersatz für:	KTR-N v. 12.08.02	Verteiler							
gemäß DIN 34	Geprüft:	17.01.03 Sha	Ersetzt durch:		W	K	V	VA			М	KC