

Made for Motion

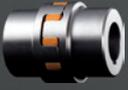


## **MATERIAL HANDLING IN MOTION**

Solutions for Indoor Material Handling

---

# Perfect connection for indoor material handling. Our drive components.

Products						
Applications	ROTEX®	BoWex®	ROTEX® GS	ROTEX® GS ZR3	TOOLFLEX®	RADEX®-NC
Packaging machines	■	■	■	■	■	■
Industrial robots			■		■	■
Linear guiding			■	■	■	■
Food processing machinery	■	■	■	■	■	■
Filling systems	■		■	■	■	■
Warehouse technology	■	■	■	■	■	■
Cranes	■	■				
Conveyors	■	■	■	■		
Recycling machinery	■	■				
Machine tools	■		■	■	■	■



## ROTEX® Torsionally flexible jaw couplings

- Jaw coupling for power transmission damping torsional vibrations
- Axial plug-in, easy assembly, maintenance-free
- Standard spiders made of high temperature-resistant T-PUR
- Application range of T-PUR from  $-50\text{ °C}$  to  $+120\text{ °C}$ , temperature peaks up to  $+150\text{ °C}$



## BoWex® Curved-tooth gear couplings

- Material combination: nylon / steel
- Compensating for shaft misalignment: axial, radial, angular
- Axial plug-in, simplified assembly
- Operative range  $-25\text{ °C}$  to  $+120\text{ °C}$
- Torques from 5 to 2,500 Nm



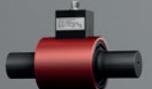
## ROTEX® GS Backlash-free servo couplings

- Backlash-free, vibration-reducing jaw-type coupling
- Axial plug-in, maintenance-free
- Electrically insulating
- Failsafe
- Torques from 0.2 to 5,850 Nm
- Ambient temperatures from  $-50\text{ °C}$  to  $+150\text{ °C}$  possible (dependent on spider)
- Couplings for machine tools, automation, power transmission, medical technology, packaging technology



## ROTEX® GS ZR3 Intermediate shaft couplings

- Intermediate shaft coupling with bonded aluminium pipe
- Easy radial coupling assembly because of split coupling hub
- Replacement of spider without shifting the driving and driven side
- Lengths up to 4 metres are possible without intermediate bearing dependent on speed and size
- Low mass moment of inertia by using aluminium

							
COUNTEX®	KTR-SI	KTR-SI FRE with ROTEX®	SYNTEX®-NC	Precision joint	Clamping sets	KTR-STOP® NC	DATAFLEX®
■	■		■	■	■		■
■	■		■		■		■
■					■		
			■	■	■		■
			■	■	■		■
■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■
■			■		■	■	■



**TOOLFLEX®**  
Metal bellow-type couplings

- Backlash-free metal bellow-type coupling
- Maintenance-free
- Ambient temperatures up to + 200 °C possible (dependent on size)
- Torques from 0.1 to 600 Nm
- Couplings for power transmission, automation, medical technology, packaging technology, machine tools



**RADEX®-NC**  
Servo lamina couplings

- Backlash-free, torsionally stiff servo lamina coupling
- Maintenance-free
- Ambient temperatures up to + 200 °C possible
- Torques from 2.5 to 300 Nm
- Couplings for automation engineering, power transmission, medical technology



**COUNTEX®**  
Shaft encoder couplings

- Backlash-free, torsionally stiff shaft encoder coupling
- Maintenance-free
- Axial plug-in
- Electrically insulating
- Shaft diameter up to Ø 14 mm possible
- Ambient temperatures from -40° C to +160° C possible



**KTR-SI**  
Overload systems

- For torques up to 8,200 Nm
- Ratchet and synchronous as well as fail-safe and idle rotation type
- High response and repeating accuracy
- Switching off with load via sensing by limit switch
- Can be combined with ROTEX®



### **KTR-SI FRE with ROTEX®** Overload systems

- Idle-rotation safety clutch (load-separating)
- High repeating accuracy
- The intelligent further development to the shear pin coupling and hydraulic overload systems
- Setting range to 60,000 Nm (higher torques on request)
- Torsionally flexible and maintenance-free
- Axial plug-in shaft-to-shaft coupling



### **SYNTEX®-NC** Backlash-free safety clutch

- Backlash-free torque transmission
- Overload protection up to 550 Nm
- Light-weight design for low mass inertia
- Short reaction times
- Large bore diameters
- Declining spring characteristic



### **Precision joint** Joint center piece and two hub shells

- Precision single/double joint
- Max. speed up to 400 RPM
- Max. diffraction angle = 45° per joint
- Available with finish bore H7; if requested, with feather keyway, square or hexagon bore
- Also available as a clamping hub



### **CLAMPEX®** Clamping elements

- Backlash-free shaft-hub connection
- Centering of shaft and hub by the clamping set
- No additional hub centering required
- Simultaneous transmission of torque and axial force
- Transmissible torques from 6 Nm to 1,640,000 Nm



### **KTR-STOP® NC** Passive clamping and braking systems

- Passive braking and clamping system with failsafe function
- Absorption of axial loads
- Multifunctional use
- Usable as plug-in system
- For different application fields (machine tools, general engineering, etc.)
- Hydraulically released system



### **DATAFLEX®** Torque measuring

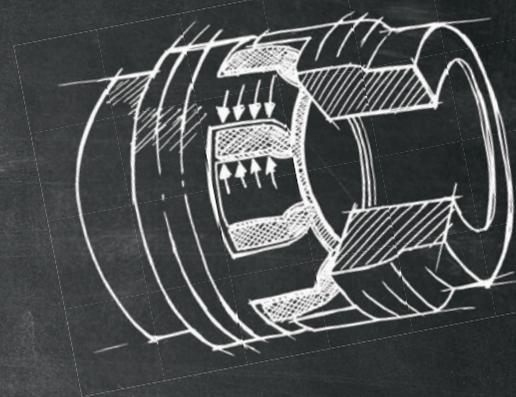
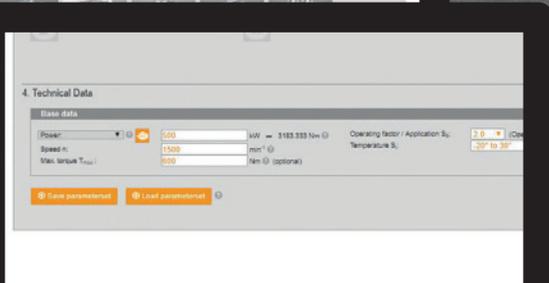
- Reliable values measured in machine monitoring, process control, test bench technology
- Measuring ranges: 10 Nm to 20,000 Nm
- Inaccuracy < 0.1% of the terminal value
- Double channel speed measurement up to 720 pulses/revolution
- Integrated f/U converter for analog speed output
- Contactless measurement
- Space-saving combination

# Faster to the destination with our new online-tools



**During the final stages of planning time is often running out.**

Our new online tools facilitate your finish: by means of filtering and comparison functions as well as clear technical data from lively 3D models and linking with the [online shop](#).



[otools.ktr.com](https://otools.ktr.com)

## Measuring displacements during operation

### Project CAS



**CAS** (Coupling Alignment Scan) monitors radial and angular displacements of the coupling during the operation signalling serious shaft displacements immediately. In order to retrace loads with various operating conditions, **CAS** records the curve of displacements.

The system consists of a double-cardanic steel lamina coupling in combination with a sensor measuring the direction and extent of shaft displacements of both lamina sets and calculating the displacement of the coupling.

#### Main applications:

- chemistry/petrochemistry
- oil/gas
- hot water and heat media
- energy and wastewater technology

## KTR.com/News

#### Headquarters

#### KTR Systems GmbH

Carl-Zeiss-Str. 25

D - 48432 Rheine

Phone: +49 5971 798-0

Fax: +49 5971 798-698 or 798-450

E-Mail: [mail@ktr.com](mailto:mail@ktr.com)

For you on site throughout the world: [ktr.com](http://ktr.com) > [contact](#)

Made for Motion

