

# APPLICATIONS AND DESIGN FEATURES PRECISION COUPLINGS

## SIZING AND SELECTION

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P. 9

## INSTALLATION AND HANDLING

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P. 21

## TORSIONALLY STIFF BELLOWS COUPLINGS

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**BK**

P. 29

### SIZES FROM 2 – 10,000 Nm

#### AREAS OF APPLICATION

for highly dynamic motion in:

- ▶ Machine tools
- ▶ Test stands
- ▶ Packaging machinery
- ▶ Printing machinery
- ▶ Paper converting machinery
- ▶ Labeling machinery
- ▶ Textile machinery
- ▶ Sorting machinery
- ▶ Automation equipment

#### FEATURES

- ▶ torsionally stiff
- ▶ low moment of inertia
- ▶ zero backlash
- ▶ highly concentric
- ▶ naturally very well balanced
- ▶ precise transmission
- ▶ infinite life
- ▶ wear and maintenance free
- ▶ easy to install

## TORSIONALLY STIFF MINIATURE BELLOWS COUPLINGS

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**MK**

P. 49

### SIZES FROM 0.05 – 10 Nm

#### AREAS OF APPLICATION

for precise transmission of angular motion and torque in:

- ▶ Linear actuators
- ▶ Semiconductor machinery
- ▶ Medical devices
- ▶ Lab automation systems
- ▶ Micro pumps
- ▶ Test and measurement systems

#### FEATURES

- ▶ zero backlash
- ▶ torsionally stiff
- ▶ precise transmission
- ▶ infinite life
- ▶ easy to install

## BACKLASH FREE SERVOMAX® ELASTOMER COUPLINGS



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### SIZES FROM 0.5 – 25,000 Nm

#### AREAS OF APPLICATION

for vibration damping torque transmission in:

- ▶ Packaging machinery
- ▶ Pump drives
- ▶ Machine tools
- ▶ Lift systems
- ▶ Conveyors
- ▶ Labeling machinery
- ▶ Food processing machinery

#### FEATURES

- ▶ vibration damping
- ▶ electrically isolating
- ▶ backlash free
- ▶ calibrated preloaded insert
- ▶ concentrically machined hubs

## BACKLASH FREE SAFETY COUPLINGS



P. 81

### SIZES FROM 0.1 – 2,800 Nm

#### AREAS OF APPLICATION

for overload protection in:

- ▶ Machine tools
- ▶ Packaging machinery
- ▶ Conveyors and feeders
- ▶ Metal forming equipment
- ▶ Test stands
- ▶ Pump drives
- ▶ Assembly systems
- ▶ Converting equipment
- ▶ Wherever rotation and overload exist

#### FEATURES

- ▶ protects from rotating inertia as well as motor torque
- ▶ precise torque overload protection
- ▶ patented preload for zero backlash
- ▶ compact simple design
- ▶ low moment of inertia
- ▶ extremely fast disengagement
- ▶ low residual friction after disengagement

SIZING

INSTALLATION

BELLOWS COUPLINGS BK

MINIATURE COUPLINGS MK

ELASTOMER COUPLINGS EK | TX

SAFETY COUPLINGS SK | ES | SL

LINE SHAFTS ZA | EZ

DISC PACK COUPLINGS LP

ATEX CERTIFIED COUPLINGS

# APPLICATIONS AND DESIGN FEATURES PRECISION COUPLINGS

## BACKLASH FREE AND SMOOTH RUNNING LINE SHAFTS



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### SIZES FROM 9 – 25,000 Nm

#### AREAS OF APPLICATION

for spanning large distances between shaft ends in:

- ▶ Material handling systems
- ▶ Printing machinery
- ▶ Labeling machinery
- ▶ Textile machinery
- ▶ Packaging machinery
- ▶ Converting equipment
- ▶ Lift systems
- ▶ Theatre automation
- ▶ Gantry systems
- ▶ Screw jack systems

#### FEATURES

- ▶ installation and removal without disturbing adjacent equipment
- ▶ self-supporting up to 6 meters
- ▶ no intermediate support bearing required

## HIGH STRENGTH DISC PACK COUPLINGS



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### SIZES FROM 350 – 20,000 Nm

#### AREAS OF APPLICATION

- ▶ API 610 pump packages
- ▶ Paper machinery
- ▶ Steel mill equipment
- ▶ Test stands
- ▶ Generators
- ▶ Bulk material handling systems
- ▶ Centrifuges
- ▶ Cooling tower drives
- ▶ Compressors
- ▶ Printing machinery

#### FEATURES

- ▶ maintenance free for infinite life
- ▶ frictional clamping of disc packs
- ▶ high speeds with extended DBSE
- ▶ zero backlash
- ▶ high torsional stiffness
- ▶ robust compact design
- ▶ precise transmission of angular motion and torque
- ▶ high operational dependability
- ▶ low restoring forces from misalignment
- ▶ compensation for lateral, axial and angular shaft misalignment

## FOR USE IN HAZARDOUS ENVIRONMENTS – ATEX

**ATEX**

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### AREAS OF APPLICATION

for safer operation in industries with explosive atmospheres, such as:

- ▶ Oil & gas extraction
- ▶ Petrochemical processing
- ▶ Munitions manufacturing
- ▶ Bulk and powder processing
- ▶ Paint systems

### FEATURES

For hazard zones 1/21 and 2/22 these couplings are authorized under directive 94/9/EG.

- ▶ Bellows couplings
- ▶ Elastomer couplings
- ▶ Safety couplings
- ▶ Line shafts
- ▶ Disc pack couplings

SIZING

INSTALLATION

BELLOWS  
COUPLINGS **BK**

MINIATURE  
COUPLINGS **MK**

ELASTOMER  
COUPLINGS **EK | TX**

SAFETY COUPLINGS  
**SK | ES | SL**

LINE SHAFTS  
**ZA | EZ**

DISC PACK  
COUPLINGS **LP**

ATEX CERTIFIED  
COUPLINGS