# Productoverview



Couplings
Coupling systems
Safety clutches



INDUSTRIETECHNIK GMBH INGENIEURBÜRO UND MASCHINENBAU

# SIMPLE SHAFT CONNECTIONS

# **Rigid coupling**

- Made of steel, standard phosphating; stainless steel version available
- Extreme form-fit rigidity
- High torque transmission
- Maintenance and wear-free
- Up to 1,420 Nm torque and 50 mm bore
- Max. speed 5,500 rpm

# **Clamp coupling DIN 115**

- Made of cast iron or steel
- Absorbs shocks and radial / axial loads
- Vertical or horizontal arrangement
- With keyway according to DIN 6885/1
- Up to 56,000 Nm torque and 200 mm bore
- Max. speed 1,700 rpm

# Flange coupling DIN 116

- Made of cast iron or steel
- Absorbs shocks and radial / axial loads
- Vertical or horizontal arrangement
- With keyway according to DIN 6885/1
- Up to 1,425,000 Nm torque and 500 mm bore
- Max. speed 6,850 rpm

# **Chain coupling**

- Made of steel, fully machined, standard surface phosphating.
- Shafts do not need to be exactly aligned, small axial play permissible
- Hardened teeth
- Maintenance without hub disassembly
- Up to 8,000 Nm torque and 110 mm bore
- Max. speed 6,000 rpm









# **COUPLINGS WITH EQUALISATION FUNCTION**

# Elastic jaw coupling (backlash free)

- Made of steel or aluminium, fully machined
- Elastomer element available in various degrees of hardness
- Vertical or horizontal arrangement
- Optionally available with extension
- Up to 55,000 Nm torque and 200 mm bore
- Max. speed 6,850 rpm

# **Polynorm coupling**

- Made of grey cast iron
- Compensation of vibrations and drive shocks
- Compensation of shaft misalignments
- Maintenance-free, fail-safe, compact, axially pluggable
- Up to 26,800 Nm torque and 200 mm bore
- Max. speed 5,000 rpm

# **VEBOFLEX** coupling

- Made of grey cast iron or steel
- Compensation of radial, axial and angular shaft misalignments
- High wear resistance, low maintenance
- Torsionally flexible, vibration-damping, puncture-proof
- Up to 1,300,000 Nm torque and 640 mm bore
- Max. speed 5,000 rpm

# **MEGIFLEX shaft coupling**

- Made of fully machined steel
- Suitable for reversing and intermittent operation
- Maintenance and wear-free
- Axially and angularly flexible, puncture-proof
- Up to 3,000 Nm torque and 80 mm bore
- Max. speed 14,000 rpm

# **Metall bellow coupling**

- Made of fully machined aluminium, stainless steel bellows
- Suitable for high operating temperatures (>300°C)
- Maintenance and wear-free
- Optionally available with extension
- Up to 30,000 Nm torque and 45 mm bore
- Max. speed 10,000 rpm











# **COUPLINGS WITH EQUALISATION FUNCTION**

# **Gear coupling**

- Made of steel, with standard surface phosphating, sleeve made of polyamide
- Statically balanced
- Maintenance and lubrication free
- Vibration damping
- Up to 5,000 Nm torque and 125 mm bore
- Max. Speed 14,000 rpm

# Steel lamina coupling

- Made of steel, fully machined
- Blade pack made of stainless steel INOX
- Torsionally stiff, maintenance-free and durable
- Optionally available with double plate pack or extension
- Up to 130,000 Nm torque and 205 mm bore
- Max. speed 14,500 rpm



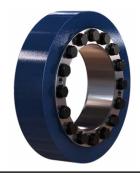




# CONE CLAMPING ELEMENTS (FRICTIONAL CONNECTION)

#### **Friction connections**

- Mechanical friction connections
- Hydraulic friction connections
- Spli friction connections
- Shaft couplings
- Flange couplings



# **Locking assemblies**

- Internal clamping sets
- External clamping elements



# FRICTION TORQUE LIMITERS, TORQUE LIMITERS

# **Mechanical torque limiters**

- Friction torque limiters
- Torque limiters (rollers, balls)
- Torque limiters free rotation
- Axial force limiters

# **Pneumatic clutches**

- Roller phase pneumatic cluthes
- Friction pneumatic cluthes
- Unlocking torque limiter





# **COUPLINGS FOR HEAVY INDUSTRY**

# **Gear coupling**

- Made from high-quality heat-treated steel
- Compensation of angular, radial and axial deviations
- Suitable for reversing operation
- Smooth running due to tooth head centring
- With visual wear indicator
- Up to 22 million Nm torque and 1,035 mm bore

# **Gear joint spindle**

- Maximum precision and smooth running
- Individually optimised sealing system to reduce wear
- New planning and retrofitting on existing systems
- Torques > 2 million Nm





# **Drum coupling (rope drum joint)**

- Made of steel, fully machined
- Positive-locking power transmission
- High permissible torque with small installation space
- Optionally with automatic wear indicator
- Up to 1,800,000 Nm torque and 625 mm bore

# **SE Safety clutch**

- High disconnection repeat accuracy
- Quick and easy re-engagement
- High load capacity / robust design
- Optionally with automatic wear indicator
- Variation options for the number / size of the safety elements and the effective diameter



# FLOHR - PRODUCTS OVERVIEW

#### **Gears**

- Spiral toothed bevel gears
- Bevel gears
- Worm gears
- Spur gears
- Special gears



# **Couplings**

- Rigid and flexible couplings
- Frictional connections
- Drum-coupling
- Gear-couplings
- Safety couplings



# **Clamping technology**

- Manual and pneumatic clamping solutions
- Power clamps
- Pivot units
- End effector solutions
- Linear units
- Grippers



## **Sensor systems**

- Incremental encoders
- Magnetic encoders
- Absolute encoders
- Electronic overspeed switches
- Electronic position switches
- Universal encoder systems
- Systems



# **Gear Technology**

- Bevel gearboxes
- Angle-planetary gearboxes
- Worm gearboxes
- Cam drives and indexing units
- Cam components
- Special gearboxes



#### **Friction connections**

- Shrink discs
- Shaft couplings
- Flange couplings
- Locking units



#### **Belt drives**

- V-belt and flat belt pulleys
- Flywheels
- Special pulleys
- Motor clamping systems
- Drive belts
- Customer designed castings
- Accessories



# **Contract manufacturing** -

- Turning, milling, grinding
- Grooving and broaching
- Balancing
- Calculation and design
- Assembly
- Service and repair



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