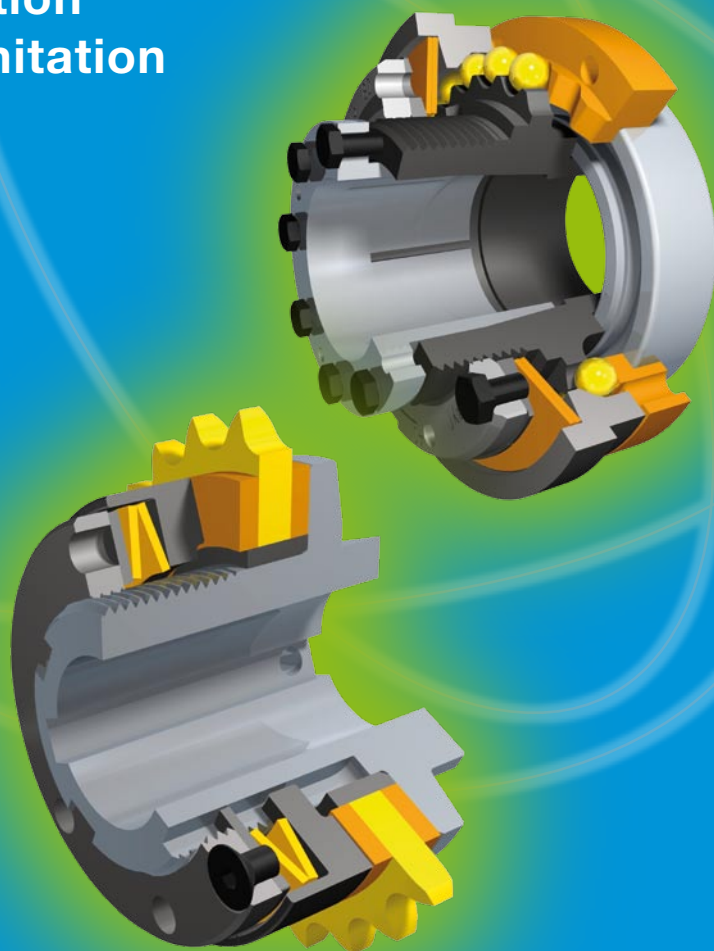




your reliable partner

Safety Clutches

Overload Protection
using Torque Limitation



mayr[®] - your reliable partner

What is your definition of reliability?

We define reliability as the highest product quality and competent service from the initial contact right up to the after-sale service

- ☐ Largest variety in selection of standard products
- ☐ Market leader's competence arising from decades of experience in the development, production and application of power transmission products
- ☐ Optimum product choice due to our expert' designs and calculations
- ☐ Reliable component dimensioning
- ☐ Intelligent platform (modular construction)
- ☐ High flexibility for individual requests and customer-tailored solutions
- ☐ Quality-inspected suppliers
- ☐ Modern, highly robust materials
- ☐ 100% quality control
- ☐ Certified according to DIN EN ISO 9001:2000
- ☐ Personal supervision from the first contact right up to the after-sale service
- ☐ Worldwide local service network
- ☐ CAD-files available online to save time and costs during construction
- ☐ 24-hour delivery service for preferred products
- ☐ Short delivery times and on-time delivery
- ☐ Unlimited replacement part availability worldwide



A Worldwide Presence

Our Sales and Service network is constantly expanding. We guarantee you and your customers almost all over the world local representation. With eight branch firms in France, Switzerland, Italy, England, Poland, the USA, Singapore and China as well as around 30 representatives and eight subsidiaries in Germany, we provide local service for our customers in all important industrial areas.



Total Quality Management

Product Quality

Every delivery which leaves our firm has been subjected to a careful quality inspection, meaning that you are able to rely 100 % on mayr[®] products. If required, we pre-adjust our clutches and brakes accurately to the requested values and confirm the product characteristics with an Inspection Report.

Quality Management

mayr[®] uses the term quality to describe its products and services. Certification of our quality management confirms the quality-consciousness of our colleagues at every level of the company.

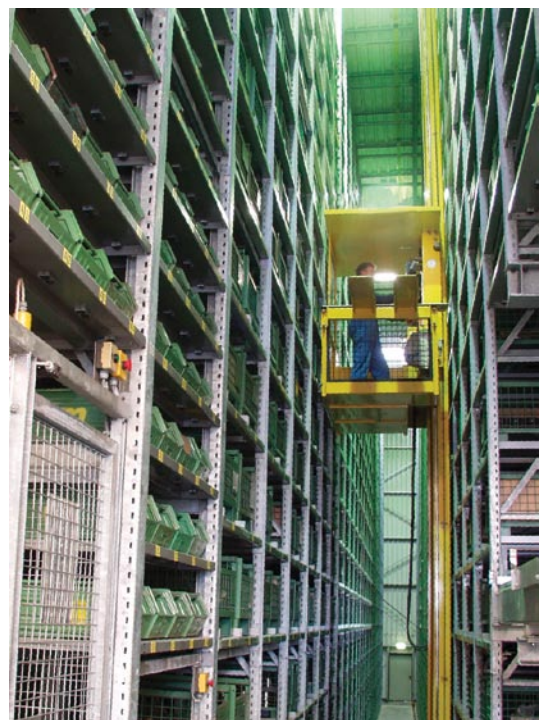
Our integrated management system is certified according to **DIN EN ISO 9001:2000 (Quality)** and **DIN EN ISO 14001 (Environment)** and complies with the **OHSAS 18001/OHRIS (Occupational Health and Safety)** demands.



Individual and Flexible Logistics

Flexible and optimally qualified colleagues ensure that your order is delivered according to schedule and with the most appropriate delivery method. We take into account your individual packing and dispatch regulations as a matter of course. Our modern high rack warehouse has a permanently available stock of our wide standard product selection.

And if you are really in a hurry, simply use our uniquely-quick basic product delivery service!



Construction and Development

We Always Have the Better Solution

With our innovative and economical solutions, we are able to set new records in the field of power transmission. Our ambition to always develop better solutions has made our company well-known worldwide.

Highly qualified engineers, high-performance 3D-CAD-systems and the most up-to-date FEM calculation aids used in our Development and Construction departments mean that our business is perfectly equipped to offer our customers effective solutions.

Experts for all Power Transmission Questions

Exploit our know-how, gained by decades of experience in the development, production and application of power transmission products. Our experts in Construction and Development are happy to advise you personally and competently when selecting and dimensioning the drive solution you require.

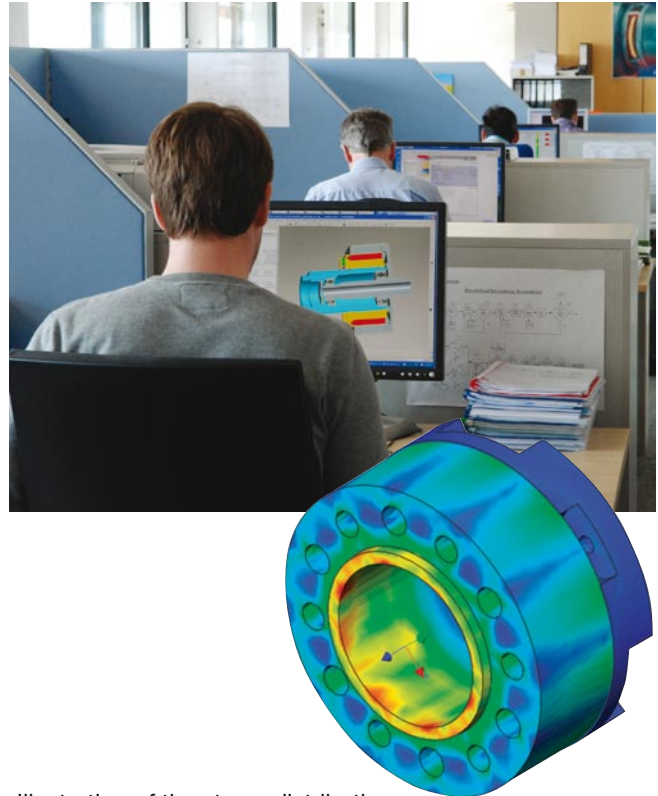


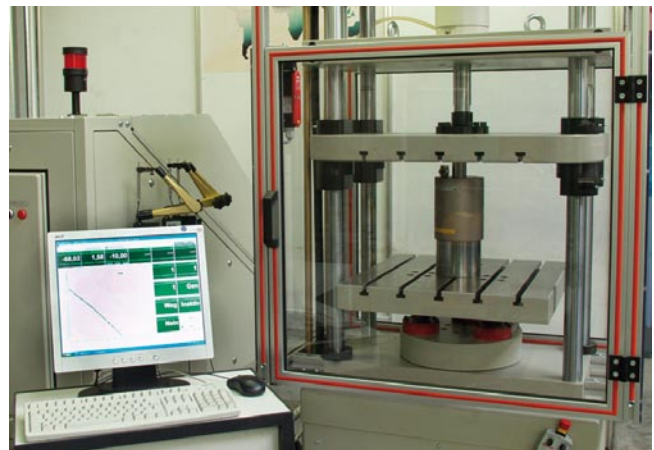
Illustration of the stress distribution in a backlash-free connection

From Prototype to Finished Product

No mayr[®] product is released onto the market until it has proved its functional capabilities and reliability in extreme, long-term tests.

The spectrum of testing stands is as varied as our range of products:

- ☐ Friction work test stands
- ☐ Wear test stands
- ☐ Noise measurement room with highly accurate noise measurement inspection devices
- ☐ Torque inspection stands up to 200.000 Nm
- ☐ Impact and alternating load test stands
- ☐ Force test stands
- ☐ Linear movement test stands
- ☐ Continuous performance test stands
- ☐ Magnetic flow measurement test stands
- ☐ High-speed test stands up to 20.000 rpm
- ☐ Misalignment and angular misalignment test stands
- ☐ Load and measurement test stands for DC motors



Product Data: Our 24-hour Service

Our website offers you detailed information 24 hours per day, 365 days per year with no delays. Here you can find not only the latest catalogues and technical documentation but also CAD-files for cost-saving construction of our products.

Unsurpassed - Our Standard Programme

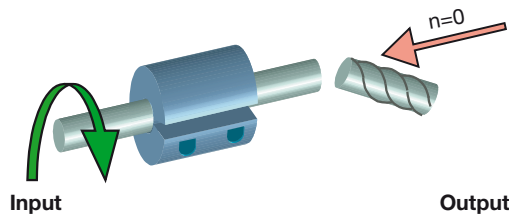
As worldwide market leaders, we are able to offer the largest product range of load holding, load separating, torque and force-limiting, frictionally-locking, magnetic, controllable and switchable safety clutches. We can also provide you with the optimum protection element for your application.

No overload protection means a high risk of damage



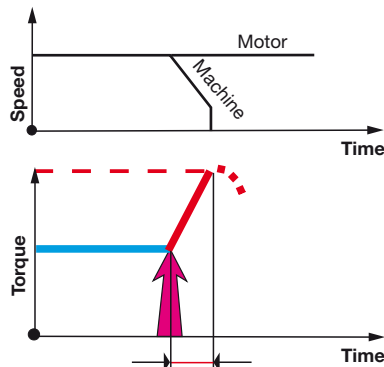
Situation

The input and output sides are connected firmly to each other (material-locking) in the drive line. There are no frictional or positive-locking connections which could give way without destruction on overload. Current changes in the motor cannot be monitored or processed.



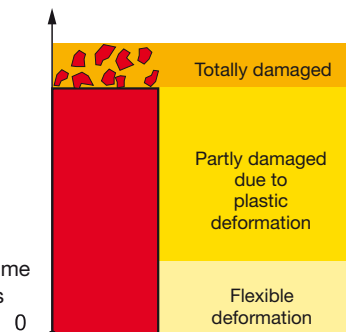
Speed and Torque Paths

After a collision, the torque increases very rapidly to values which can be much higher than the operating torque. This overload leads to breaks in the drive line. The motor continues to run; the machine speed falls to 0.



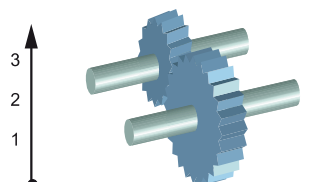
Risk of Damage

Collisions without overload protection usually lead to the machine being completely damaged. The weakest link in the drive line breaks. The machine is no longer operational and downtime will last until the repairs have been carried out.



Dimensioning

Heavy, solid and slow-running constructions with high safety factors are necessary in order to keep collision factors as low as possible.



Costs

- Expensive replacement parts
- Complicated repairs
- Long downtimes

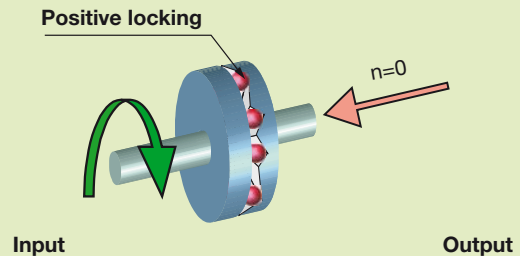


Perfect overload protection with EAS®-clutches



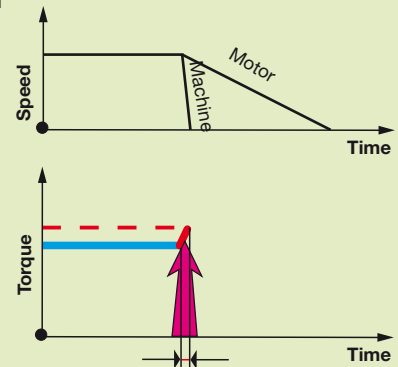
Situation

EAS®-clutches combine input and output-sides using positive locking and limit the torque accurately to the set value. These clutches work with an extremely high setting and repeating accuracy.



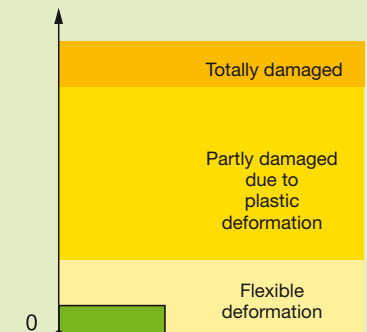
Speed and Torque Paths

On overload, the clutch disengages and separates input and output as quickly as possible. The stored rotatory energy is disconnected and runs free. A limit switch registers clutch disengagement and switches off the drive.



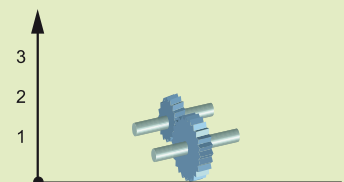
Risk of Damage

The high accuracy and exact torque limiting mean that the drive line is not damaged. All components remain within the flexible deformation range.



Dimensioning

Small and light constructions are possible due to accurate torque limiting and exact predictions on component load.



Costs

Costs incurred due to damage or wear are no longer to be expected. After a short downtime to remove the overload, the system can be re-started.



Why is it worth using EAS®-safety clutches?

Advantages for the Machine Manufacturer

Safety clutches ensure that the load on the components does not exceed the permitted values due to exact torque limitation.

This means that the modern demands on the machine construction can be fulfilled without risk.

- ☐ Reduction of constructional safety factors
- ☐ Optimum machine dimensions
- ☐ Low mass moment of inertia
- ☐ Smaller drive motors and gearbox
- ☐ Material and price reductions
- ☐ High rigidity and vibration-free transmission

Advantages for Productional Operation

No machine is safe from collisions. They occur due to incorrect operation, control software and hardware malfunctions or ambient influences such as foreign objects.

Safety clutches provide reliable protection and ensure:

- ☐ Low operational costs
- ☐ Minimum repair time expenditure
- ☐ High system availability
- ☐ High productivity
- ☐ Punctual production
- ☐ Good delivery image for customers

Classification of *mayr*®-safety clutches

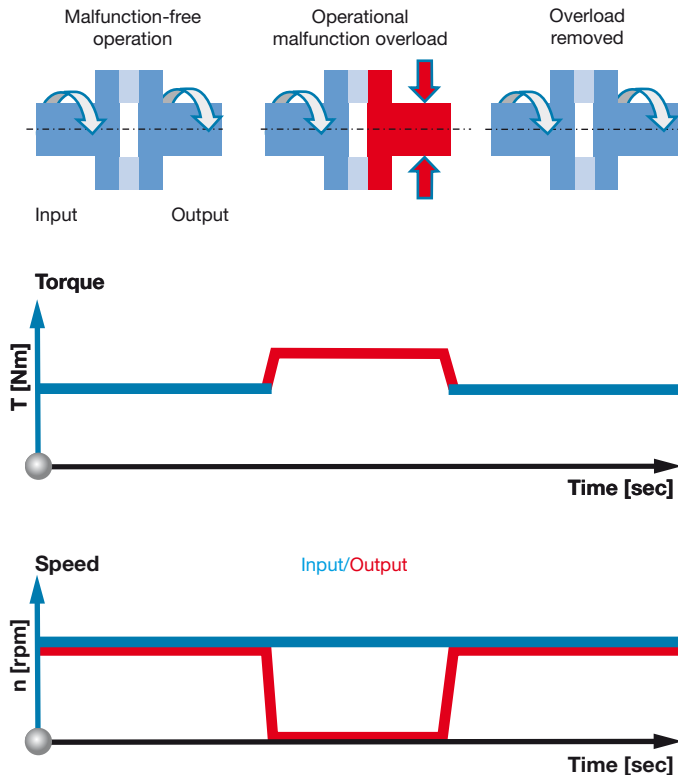
7 – 16

	Torque limiting	Force limiting	Frictionally-locking	Positive-locking	Magnetic	Ratchetting	Disengaging	Pneum. switchable + controllable	Electr. switchable + controllable	Rustproof	Rustproof and sealed	Catalogue page
Load holding safety clutches												
ROBA®-slip hubs	x		x									7
EAS®-torque sensor	x			x								8
ROBA®-contitorque / ROBA®-capping head	x				x					x	x	9
Load separating safety clutches												
EAS®-Compact® / EAS®-NC	x			x		x				x	x	10
EAS®-smartic®	x			x		x						11
EAS®-400	x			x		x						11
EAS®-Compact®-overload clutch	x			x			x					12
EAS®-element clutch	x			x			x					13
EAS®-elements	x			x			x					13
EAS®-Sp	x			x			x	x				14
EAS®-Sm / EAS®-Zr	x			x			x		x			15
EAS®-axial		x		x			x					16
Corrosion-resistant torque limiting clutches												17
Limit Switch												19
Application Examples												21



According to German notation, decimal points in this document are represented with a comma (e.g. 0,5 instead of 0.5).
We reserve the right to make dimensional and constructional alterations.

Load holding frictionally-locking safety clutches

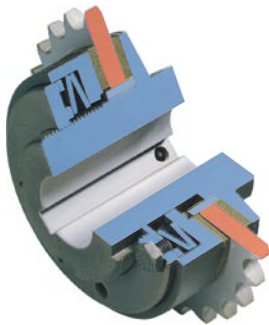


Characteristics:

- ☐ **Slipping on overload. The device can continue operation immediately after elimination of the overload**
- ☐ Torque transmission due to frictional locking
- ☐ Simple to install and handle
- ☐ The torque can be set easily and steplessly using Tables
- ☐ High-quality friction materials provide lowest-possible wear
- ☐ Low friction value tolerance due to optimized construction and materials
- ☐ Excellent repeat accuracy

ROBA[®]-slip hubs

Torque range 2 up to 50.000 Nm



Designs

- ☐ Standard design for narrower drive elements e.g. single-row chain sprockets
- ☐ ROBA[®]-max for very wide drive elements and for elements with a small diameter
- ☐ With rustproof running surfaces for operation outside, in humid conditions or longer downtimes
- ☐ With a clamping hub for fast, cost-saving installation
- ☐ With a needle bearing for drive elements with high radial loads, a high slipping frequency and high demands on the shaft run-out accuracy
- ☐ With a flexible or torsionally rigid coupling for connection of two shafts and to compensate for shaft misalignment

Applications

- ☐ Test stands
- ☐ Conveyor technology
- ☐ Crusher
- ☐ General mech. engineering
- ☐ Extruder
- ☐ Filling plants



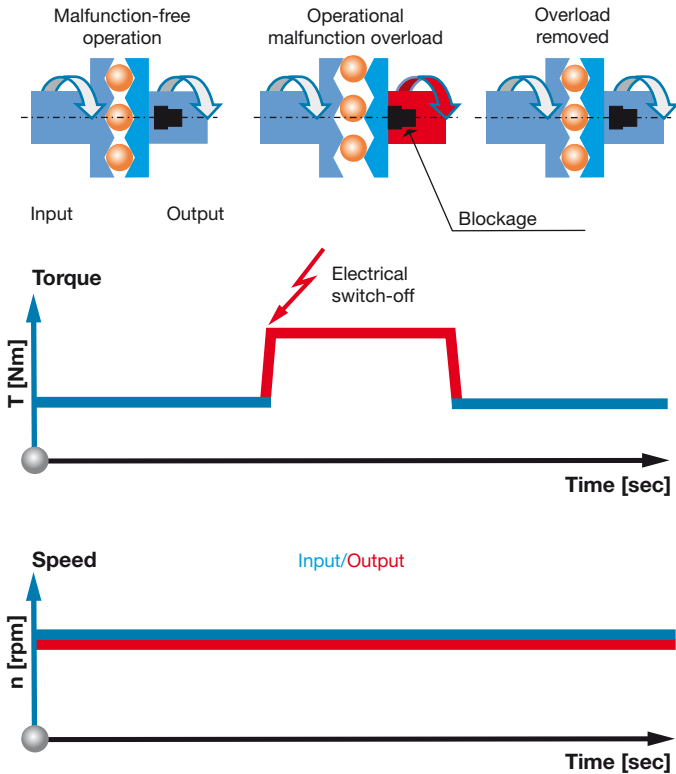
ROBA[®]-slip hub for ensuring safety for conveyor belts in a bottle-filling plant

For further designs, detailed technical data and dimensions, please see catalogue

ROBA[®]-slip hubs

K.123.V

Load holding positive-locking safety clutches



Characteristics:

- ☐ Emits a signal immediately on overload, but does not separate the masses — ideal for vertical applications
- ☐ Connects the input and the output via positive locking in all operating conditions failsafe
- ☐ Torque can be adjusted easily and steplessly using the scaled adjusting nut

EAS[®]-torque sensor

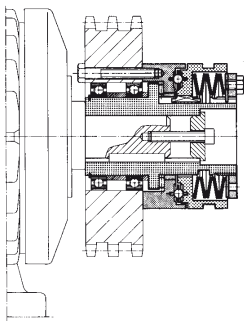
Torque range 5 up to 12.000 Nm



Designs

- ☐ Flange design for mounting onto bearing-supported drive elements such as chain sprockets, toothed wheels and pulleys
- ☐ Design with integrated bearing for simple symmetrical and narrow drive elements. Simple, ready-to-mount clutch
- ☐ Design with a long hub for wide drive elements (see Installation Example)
- ☐ Designs with flexible couplings for connection of two shafts and to compensate for shaft misalignment

Installation Example



Applications

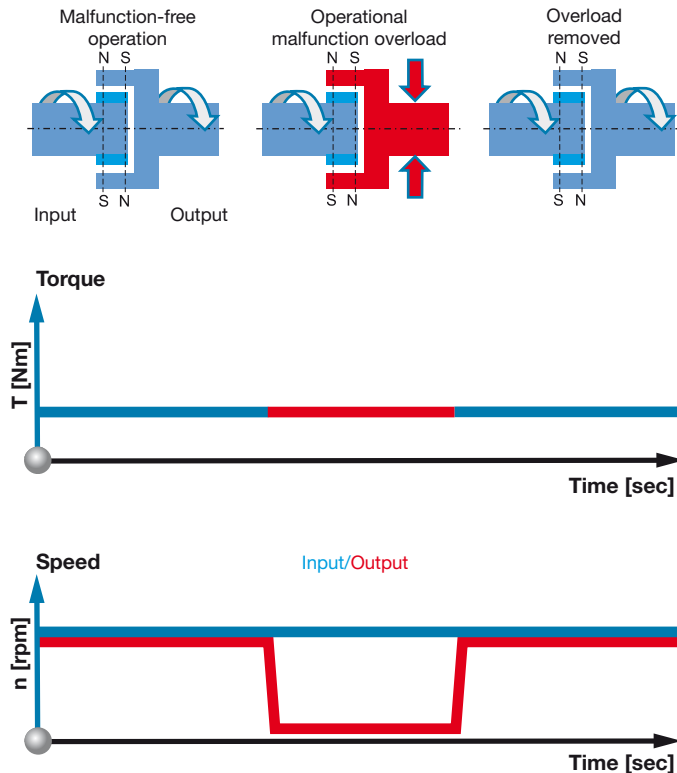
- ☐ Vertical drives
- ☐ Hoists
- ☐ All drives in which separation of the shafts is not permitted

For further designs, structural shapes, detailed technical data and dimensions, see catalogue

EAS[®]-standard

K.407...

Load holding, magnetic safety clutches



Characteristics:

- ☐ Long-term continuous torque due to magnetic hysteresis principle
- ☐ Wear and maintenance-free
- ☐ Torques are transmitted contactlessly and synchronously via magnetic forces
- ☐ Precise torque limiting on overload
- ☐ Torque easily and steplessly adjustable using the scale marked with torque values
- ☐ Can be used as a clutch or brake
- ☐ Low weight and mass moment of inertia

ROBA[®]-contitorque

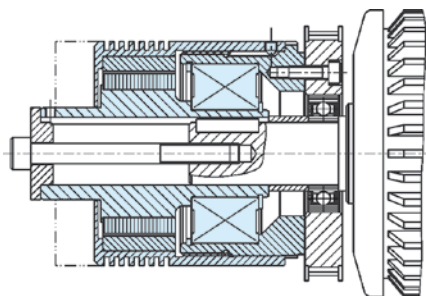
Torque range 0,1 up to 12 Nm



Designs

- ☐ Two torque ranges per installation size for most accurate torque graduation
- ☐ Rustproof stainless steel design
- ☐ Sealed; can be used in foodstuffs plants
- ☐ Design with rustproof hysteresis-capping head: ROBA[®]-capping head

Installation Example



The clutch is mounted directly onto the shaft. The pulley is bearing-mounted separately on the motor shaft and screwed to the clutch.

Applications

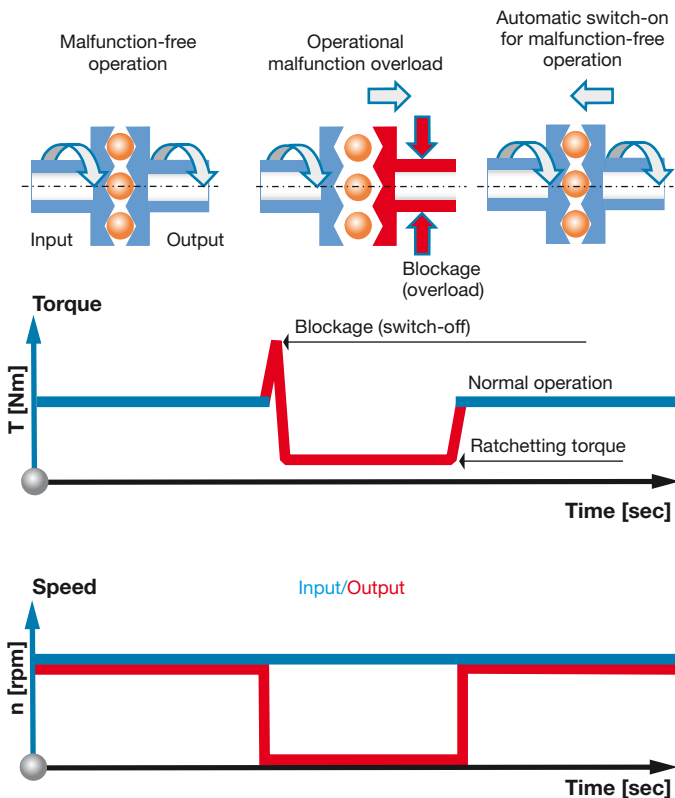
- ☐ In test stand technology, this device can simulate defined loads
- ☐ Can be used to screw open tops of any kind
- ☐ Force limitation for coiling and uncoiling procedures
- ☐ Torque limitation in different power transmission applications
- ☐ Rail / switch plate adjustments (railway)

For detailed technical data and dimensions, see catalogues

ROBA[®]-contitorque
ROBA[®]-capping head

K.150.V _ _ _
P.151000.V _ _ _

Load separating ratchetting safety clutches



Characteristics:

- ☒ **Immediate separation; automatic re-engagement**
- ☐ Transmits the torque backlash-free in normal operation
- ☐ Separates input and output in milliseconds on overload
- ☐ High switch-off and repeat accuracy
- ☐ Torque adjustable via Adjustment Tables easily and steplessly
- ☐ Electrical signal emittance on overload via limit switch
- ☐ Re-engagement every 15° or synchronously after 360°
- ☐ High rigidity

EAS®-Compact®/EAS®-NC

Torque range 0,65 up to 2.400 Nm

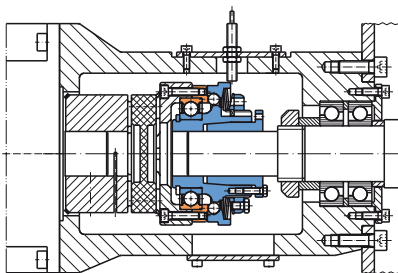


Universal overload protection in a wide variety selection

Designs

- ☐ Flange clutches with single or double bearings for direct mounting onto drive elements such as pulleys, toothed wheels and chain sprockets
- ☐ Design with a long hub for mounting very wide drive elements. An additional bearing on the hub using a roller bearing or a plain bearing is possible
- ☐ Combinations using torsionally rigid flexible couplings for the connection of two shafts and to compensate for shaft misalignment
- ☐ Rustproof design with or without sealing or in a sealed housing with standard connection dimensions

Installation Example



EAS®-Compact® with backlash-free, torsionally flexible and vibration-damping shaft coupling for the connection of two shafts. The clutch compensates for axial, radial and angular misalignment.

Applications

- | | |
|---|--|
| <input type="checkbox"/> General drive technology | <input type="checkbox"/> Printing and paper machines |
| <input type="checkbox"/> Automation technology | <input type="checkbox"/> Foodstuffs technology |
| <input type="checkbox"/> Machine tools | <input type="checkbox"/> Conveyor technology |
| <input type="checkbox"/> Packaging machines | <input type="checkbox"/> Drinks industry |

For further designs, structural shapes, detailed technical data and dimensions, see catalogues

EAS®-Compact®
EAS®-NC

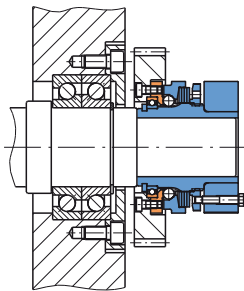
K.490.V
K.405.V

EAS[®]-smartic[®]

Torque range 2,7 up to 500 Nm



Installation Example



EAS-smartic[®] flange clutch with clamping hub. The drive element is centred onto the deep groove ball bearing and screwed to the pressure flange.

Extremely compact; high performance density

Designs

- ☐ Flange clutches for direct mounting onto drive elements such as pulleys, toothed wheels and chain sprockets
- ☐ Shaft connection via the key hub or clamping hub
- ☐ Simple, fast installation by tightening one single screw
- ☐ Can be combined with backlash-free flexible couplings for the connection of two shafts, compensation of shaft misalignment and damping critical vibrations
- ☐ For large shaft diameters

Applications

- | | |
|---|--|
| <input type="checkbox"/> General drive technology | <input type="checkbox"/> Printing and paper machines |
| <input type="checkbox"/> Automatisations technology | <input type="checkbox"/> Foodstuffs technology |
| <input type="checkbox"/> Machine tools | <input type="checkbox"/> Conveyor technology |
| <input type="checkbox"/> Packaging machines | <input type="checkbox"/> Drinks industry |

For further designs, structural shapes, detailed technical data and dimensions, see catalogue

EAS-smartic[®]

K.481.V_..._...

EAS[®]-400

Torque range 2,5 up to 6.000 Nm



Low backlash; has proved its worth over decades

Designs

- ☐ Flange design for mounting onto bearing-supported drive elements such as chain sprockets, toothed wheels and pulleys
- ☐ Design with integrated bearing for simple symmetrical and narrow drive elements. Simple, ready-to-mount clutch
- ☐ Design with long hub for wide-collared drive elements
- ☐ Design with torsionally rigid or flexible couplings for connection of two shafts and to compensate for shaft misalignment

Applications

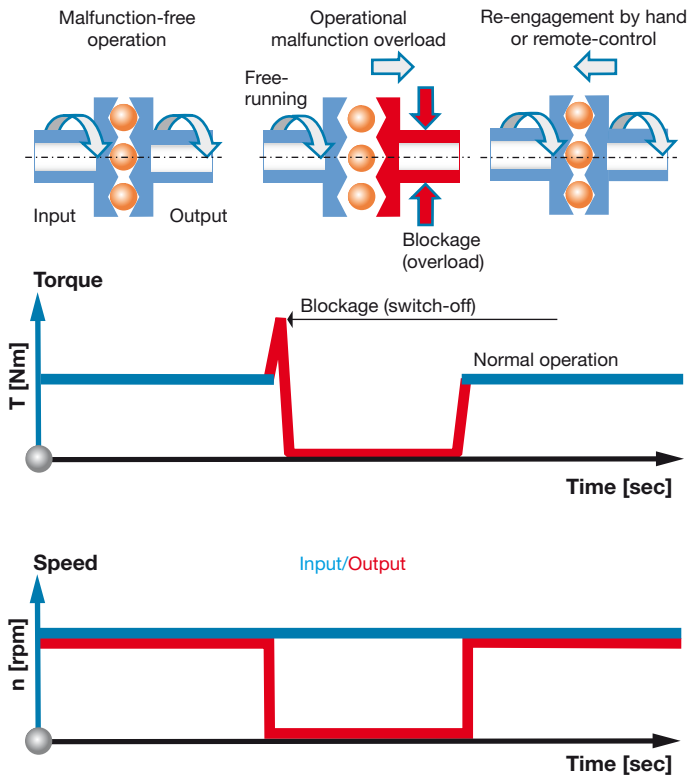
- ☐ This product has been used successfully in all areas of mechanical engineering for more than 45 years

For further designs, structural shapes, detailed technical data and dimensions, see catalogue

EAS-Standard

K.407_..._...

Load separating disengaging safety clutches

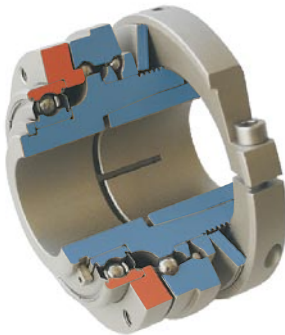


Characteristics:

- ☐ Immediate drive separation on overload
- ☐ Free run-out
- ☐ Exact and repeatable response
- ☐ Re-engagement by hand or remote-controlled
- ☐ Torque adjustable easily and steplessly using Adjustment Tables
- ☐ Operation possible with or without limit switch for sensing overload
- ☐ Transfers the torque in malfunction-free operation backlash-free

EAS®-Compact® overload clutch

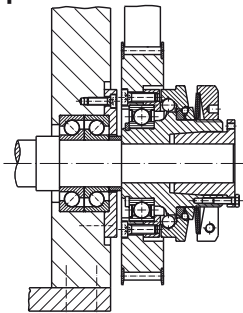
Torque range 5 up to 3.000 Nm



Designs

- ☐ Flange clutch with integrated ball bearing for direct mounting onto drive elements such as pulleys, toothed wheels and chain sprockets
- ☐ If requested, a device with a long hub and double mounting bearing for very wide drive elements is available
- ☐ Combinations with flexible couplings for connection of two shafts and to compensate for shaft misalignment are available

Installation Example



EAS®-Compact® overload clutch with a short hub. The clutch interrupts the transmission between the motor and the toothed belt pulley on overload and remains disengaged.

Applications

- | | |
|---|--|
| <input type="checkbox"/> General drive technology | <input type="checkbox"/> Printing and paper machines |
| <input type="checkbox"/> Automatisations technology | <input type="checkbox"/> Foodstuffs technology |
| <input type="checkbox"/> Machine tools | <input type="checkbox"/> Conveyor technology |
| <input type="checkbox"/> Packaging machines | <input type="checkbox"/> Drinks industry |

For further designs, structural shapes, detailed technical data and dimensions, see catalogue

EAS®-Compact®-overload clutches K.490.V _ _ _ _

EAS[®]-element clutch

Torque range 250 up to 280.000 Nm

Designs

- ☐ Torque limitation for heavy and fast-running drives in connection with large rotating masses which, on overload, must slow down freely
- ☐ Structural shapes designed for direct mounting of drive elements
- ☐ Combinations with torsionally flexible couplings available for connection of two shafts with shaft misalignment compensation
- ☐ Extremely compact construction as a perfect alternative to hydraulic clamping sets and shear pins



EAS[®]-overload clutch in a rolling mill:

The pinion stand gearbox with four output shafts is connected via the EAS[®]-overload clutch and the cardan shaft with the rolling frame.

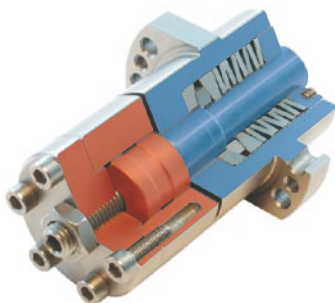


For further designs, structural shapes, detailed technical data and dimensions, see catalogue

EAS[®]-element clutch

K.440.V _ _ _ _

EAS[®]-elements



For further designs, structural shapes, detailed technical data and dimensions, see catalogue

EAS[®]-elements

K.440.V _ _ _ _

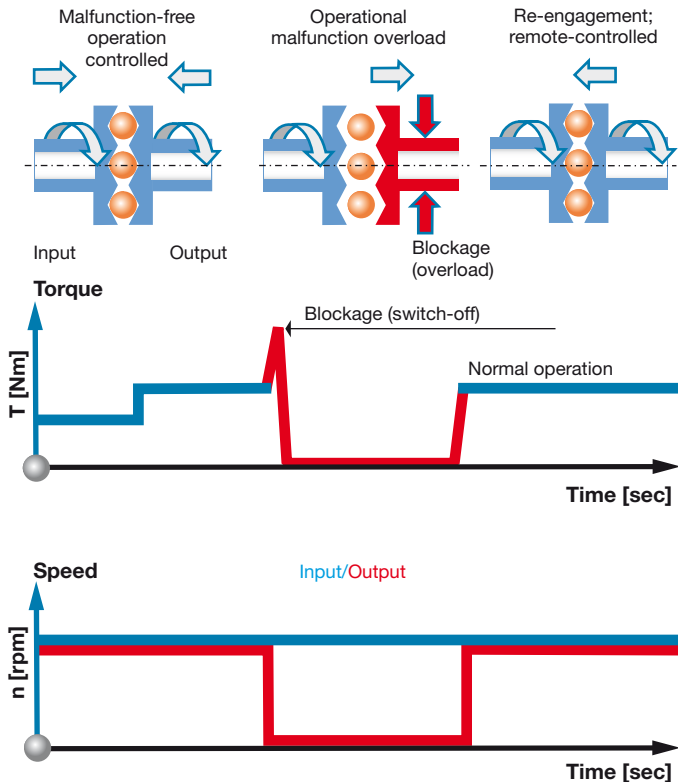
Designs

- ☐ Torque and force-limiting elements
- ☐ Residual torque-free separation of input and output on overload
- ☐ Re-engagement possible using mechanical, pneumatic or hydraulic devices

Applications

- ☐ Replacement for shear pins
- ☐ Can be integrated into pre-existing systems
- ☐ Can be used for linear movements
- ☐ Turntable and rotating assembly drives

Load separating switchable and controllable safety clutches



Characteristics:

- ☐ **Separates immediately on overload at the controlled switch-off torque**
- ☐ Pneumatic or electrically switchable and controllable
- ☐ Synchronous coupling after each full turn on EAS®-Sp and EAS®-Sm
- ☐ Coupling in 15°-steps on EAS®-Zr
- ☐ High switch-off and repeat accuracy
- ☐ Torque can be steplessly adjusted via compressed air or electrical power
- ☐ Optimum torque adaptation possible in every production process phase
- ☐ Application-tailored switching and control devices for optimum use of function and performance range

EAS®-Sp

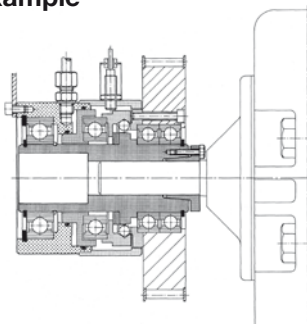
Torque range 4 up to 2.500 Nm



Designs

- ☐ Pneumatic clutch with steplessly adjustable torque using the amount of air pressure
- ☐ Flange clutch with two integrated ball bearings for direct mounting onto drive elements such as pulleys, toothed wheels and chain sprockets
- ☐ Combination with torsionally rigid flexible coupling for connection of two shafts and to compensate for shaft misalignment
- ☐ Designed for automated machines with changing operation conditions or changing cycle sequences and speeds

Installation Example



EAS®-Sp clutch mounted onto the shaft end. The device is secured by a cone bushing, thus ensuring backlash-free torque transmission and axial securement.

Applications

- ☐ Filling machines
- ☐ Printing machines
- ☐ Packaging machines
- ☐ Conveyor technology

For further designs, structural shapes, detailed technical data and dimensions, see catalogue

EAS®-Sp/EAS®-Sm/Zr

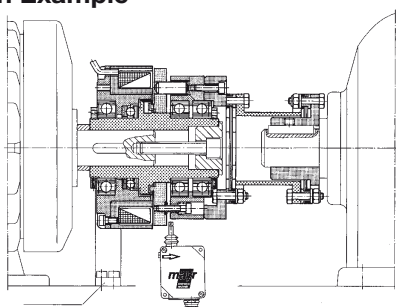
K.406.V _ _ _

EAS®-Sm/EAS®-Zr

Torque range 6 up to 375 Nm



Installation Example



EAS®-Sm with torsionally rigid flexible all-steel coupling positioned between the motor and the gearbox.

Designs

- ☐ Electromagnetic clutch with electrical current-controlled steplessly adjustable torque
- ☐ Flange clutch with two integrated ball bearings for direct mounting of drive elements such as pulleys, toothed wheels and chain sprockets
- ☐ Design with cover for dusty and dirty operation areas
- ☐ Combination with torsionally rigid flexible coupling for connection of two shafts and to compensate for shaft misalignment
- ☐ Designed for automated machines with changing operating conditions or changing cycle sequences and speeds

Applications

- ☐ Filling machines
- ☐ Printing machines
- ☐ Packaging machines
- ☐ Conveyor technology

For further designs, structural shapes, detailed technical data and dimensions, see catalogue

EAS®-Sp/EAS®-Sm/Zr

K.406.V

Electronic Control Units



Designs

EAS®-Sp control unit

- ☐ Controls the pneumatic controllable safety clutch EAS®-Sp simply and safely
- ☐ Reliable monitoring of the switching conditions in the clutch
- ☐ Emits a signal if the set torque is exceeded

EAS®-Sm control unit

- ☐ Switches and controls the EAS®-Sm/Zr safety clutches
- ☐ Varies the torque steplessly via the electrical power
- ☐ Emits a signal if the set torque is exceeded

For further designs, structural shapes, detailed technical data and dimensions, see catalogue

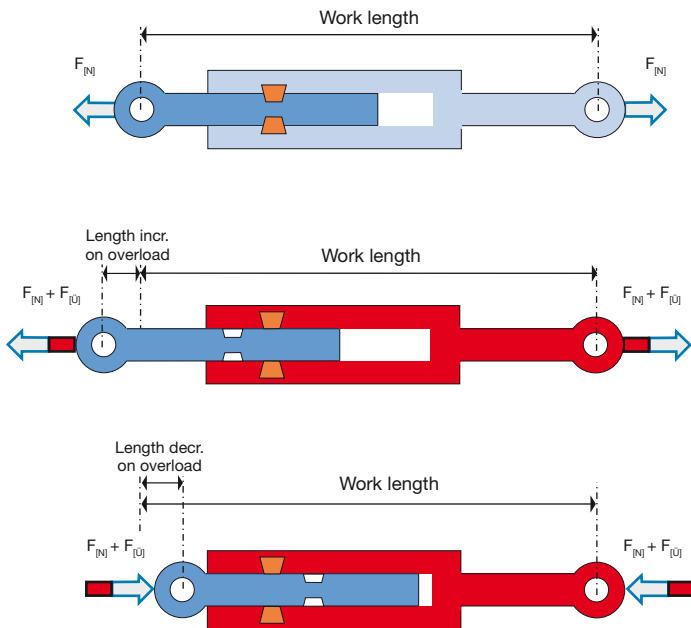
EAS®-Sp/EAS®-Sm/Zr

K.406.V

Load separating safety clutches for linear movement

Characteristics:

- ☐ Separates immediately on overload, re-engages synchronously
- ☐ Forces are transmitted backlash-free up to the set release force
- ☐ High axial rigidity
- ☐ Reliably limits tensile and compressive forces
- ☐ Re-engages automatically exactly at the place of disengagement
- ☐ Free stroke in both tensile and compressive direction can be defined by the customer
- ☐ Release force can be steplessly adjusted



EAS[®]-axial

Force range 75 up to 300.000 N



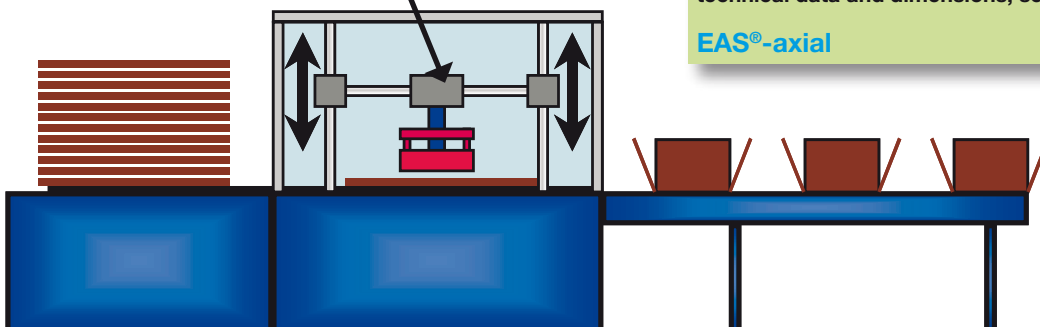
Designs

- ☐ Flexible modular form for optimum adaptation of the protective elements to the respective application

Applications

- ☐ In cam-controlled feed drives
- ☐ As a torque support for shaft-mounted gearboxes
- ☐ As a force limiter in a crank drive

EAS[®]-axial in a box packaging machine



For further designs, structural shapes, detailed technical data and dimensions, see catalogue

EAS[®]-axial

K.403.C.V _ _ _

Corrosion-resistant torque limiting clutches

Mechanical torque limiting clutches are the only reliable means of maximising the productivity and economic efficiency of machines and systems. These clutches prevent damage in case of malfunctions and collisions and therefore also expensive downtimes and repairs.

In the food industry, the chemical industry and in process engineering, there are often ambient conditions, which only torque limiting clutches with high-quality corrosion protection are able to withstand without any damage over long periods of time.

Standard torque limiting clutches are normally not suitable for such application areas, in which moisture, cleaning agents or aggressive media are among the everyday ambient conditions.

mayr® power transmission offers two fundamentally different clutch variants, which are optimally suited for such application fields.

You have the choice between sealed torque limiting clutches or designs made of rustproof materials – normally made of stainless steel.

mayr® offers backlash-free torque limiting clutches in rustproof design and with different sealing variants. The sealed designs are not only protected against corrosion, but also against penetration of dirt and moisture as well as against washing out of lubricant.

An advantage which is especially required and appreciated in sensitive areas of the food industry.

EAS®-Compact® rustproof

Completely made of rustproof stainless steel *



* Cup spring with high-quality corrosion protection



We manufacture the EAS®-Compact® in rustproof design for your series requirements

- Identical in design with the EAS®-Compact® standard
- Synchronous function
- Automatic re-engagement
- Mechanical separation of input and output in case of overload
- Precise torque limitation with high disengagement and repetitive accuracies
- Permanent backlash-free torque transmission
- Long service life due to hardened functional components
- Use of lubricants with approval for the food industry

For further designs, structural shapes, detailed technical data and dimensions, see catalogue

EAS®-Compact®-R

P.49A.V _ _ _

EAS®-Compact® sealed

Completely made of rustproof stainless steel **, with seal



** Cup spring with high-quality corrosion protection



- No penetration of cleaning liquids or any other media, no emission of grease
- Completely enclosed due to rustproof seal
- Synchronous function
- Automatic re-engagement
- Mechanical separation of input and output in case of overload
- Precise torque limitation with high disengagement and repetitive accuracies
- Permanent backlash-free torque transmission
- Long service life due to hardened functional components
- Use of lubricants with approval for the food industry

For further designs, structural shapes, detailed technical data and dimensions, see catalogue

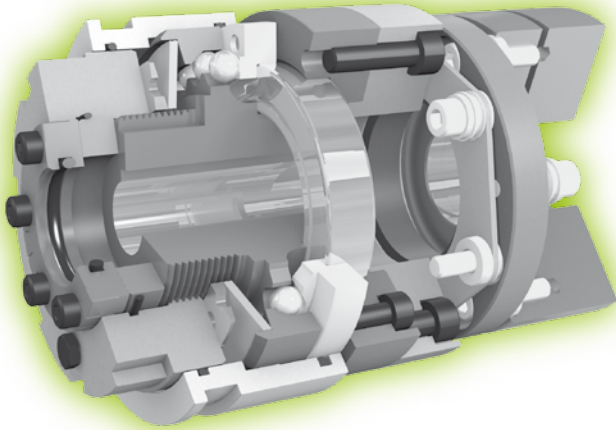
EAS®-Compact®-R

P.49A.V _ _ _

Corrosion-resistant torque limiting clutches

EAS®-Compact® rustproof, torsionally rigid

Combined with the rustproof, torsionally rigid
shaft coupling ROBA®-DS



- Permanently backlash-free torque transmission
- Compensation of angular, axial and radial shaft misalignments via the torsionally rigid shaft coupling ROBA®-DS
- Flexible adjustment of the construction length for the connection of shafts with different shaft distances
- Optimally suited if high torsional spring rigidity or high speed values are required

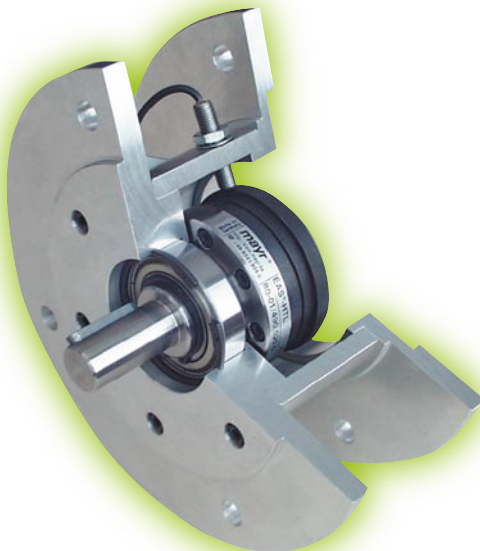
For further designs, structural shapes, detailed
technical data and dimensions, see catalogue

Corrosion-resistant
torque limiting clutches

IMG.401.V _ _ _

EAS®-HTL Housed Torque Limiter

Integrated in IEC and
NEMA housings



- EAS®-Compact® in a housing with IEC or NEMA flanges (housing protection IP53)
- Integrated limit switch for switch-off in case of overload
- Cost-effective, closed unit
- Easy installation due to standardised connection dimensions and short design
- Fail-safe and reliable due to protection against mechanical damage, corrosion, penetration of dirt and washing out of grease

For further designs, structural shapes, detailed
technical data and dimensions, see catalogue

EAS®-HTL

P.HTL.V _ _ _

Limit Switch Type 055.00_.5

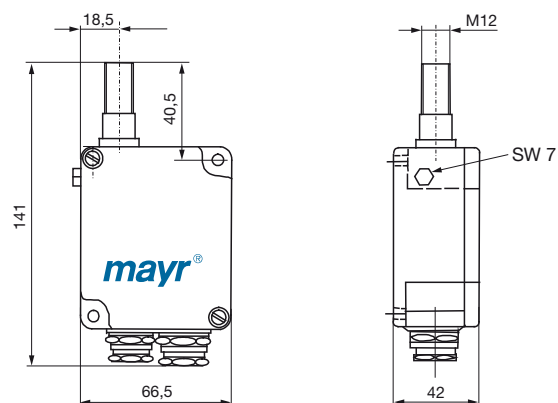
contactless actuation



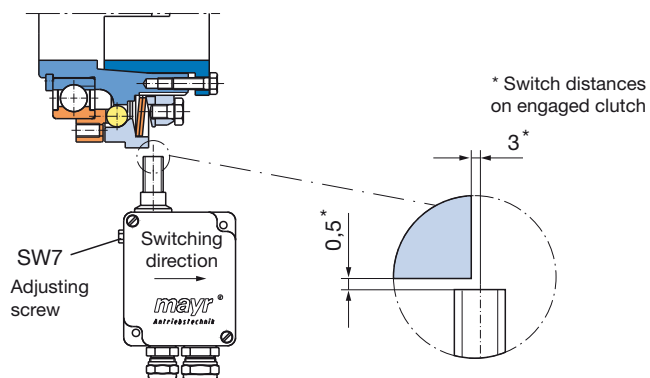
Characteristics:

- registration of axial and radial disengaging movements
- either internal or external NAMUR-sensor
- floating change over-contacts
- adjustable zero-point
- robust light metal housing

Dimensions



Installation example



Certifications



Limit Switch Type 055.012.6

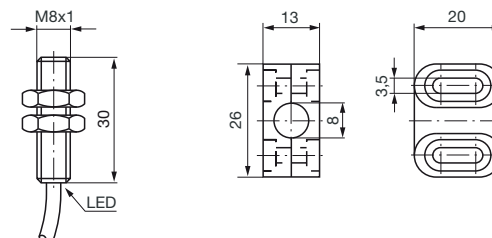
contactless actuation



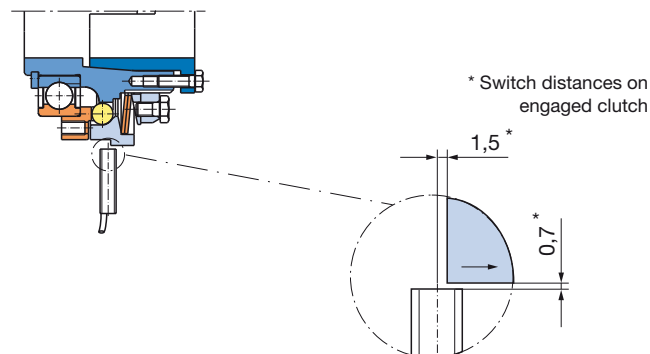
Characteristics:

- registration of axial disengagement movements
- PNP NO contact
- cost-effective

Dimensions



Installation example



Certifications

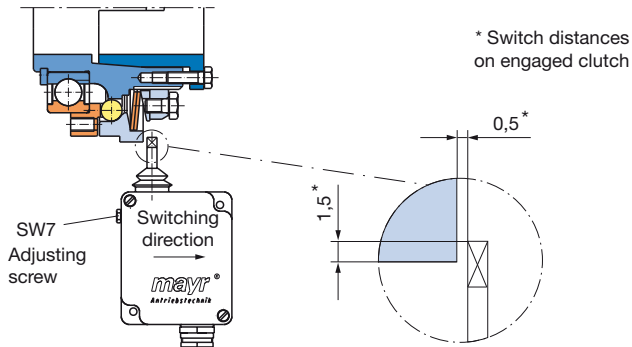


Limit Switch Type 055.000.5

mechanical actuation



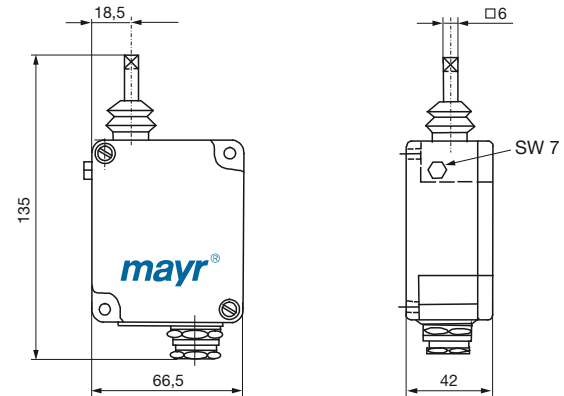
Installation example



Characteristics:

- registration of axial disengaging movements
- adjustable zero point
- robust light metal housing

Dimensions



Certifications

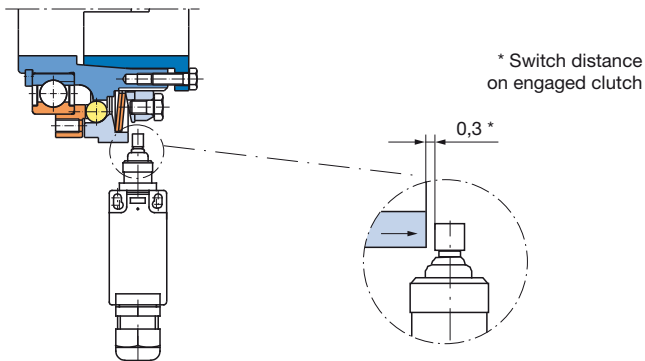


Limit Switch Type 055.010.6

mechanical actuation, multi-directional



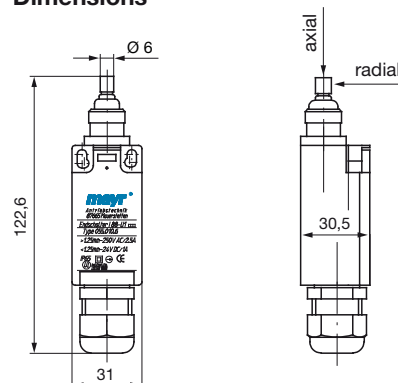
Installation example



Characteristics:

- registration of axial and radial disengaging movements
- positive opening contacts ➞

Dimensions



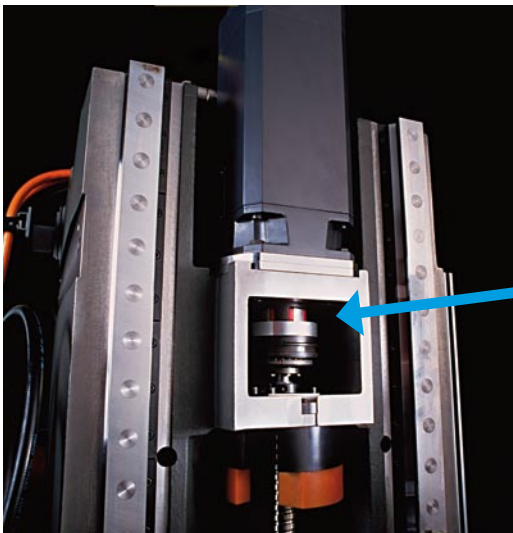
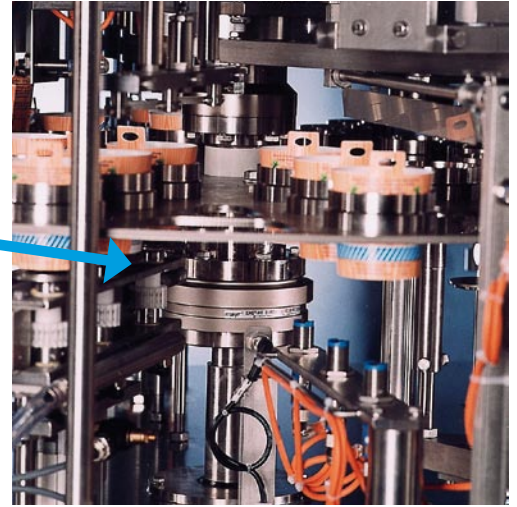
Certifications



Application Examples



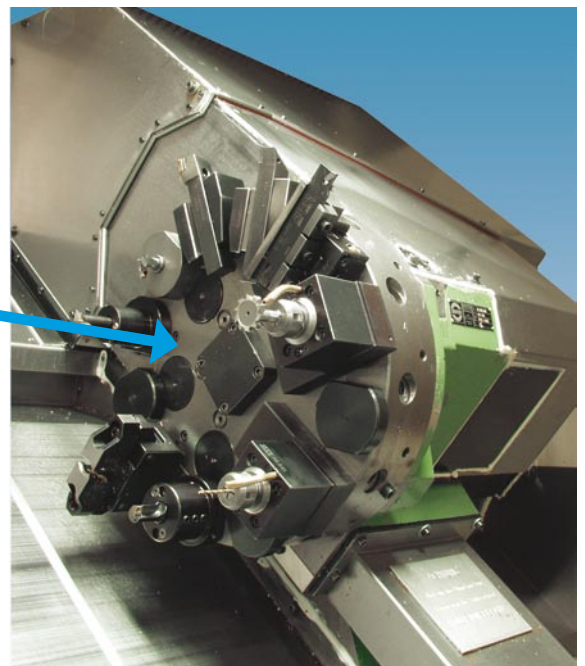
EAS®-Compact® rustproof in a filling machine for cream cheese



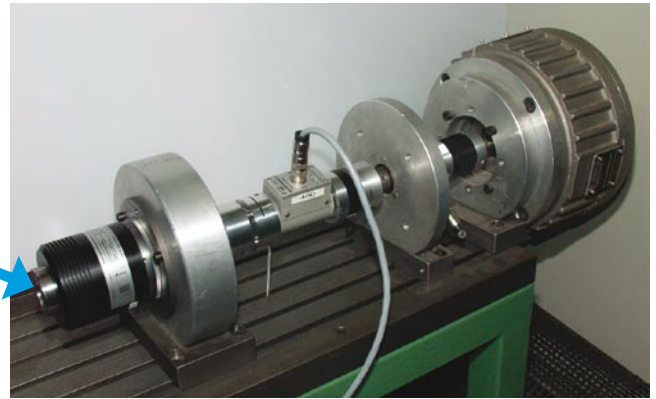
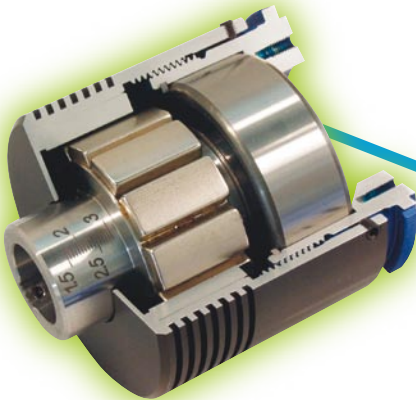
Combination of a backlash-free EAS® torque limiting clutch with a flexible ROBA®-ES shaft coupling in the Z-axis of a machine tool



EAS®-Compact®, the backlash-free overload clutch for tools turrets



Application Examples



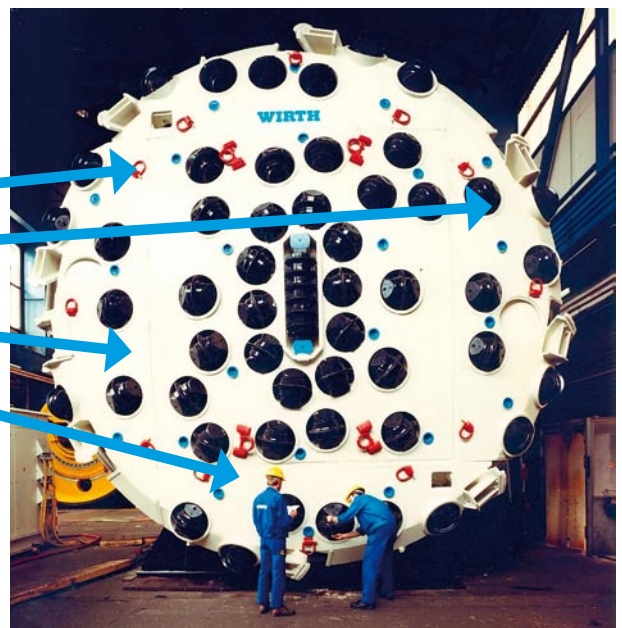
ROBA[®]-contitorque in a test stand for simulation of defined loads



EAS[®]-Compact[®] for torque limitation in a stretch - blow moulding machine



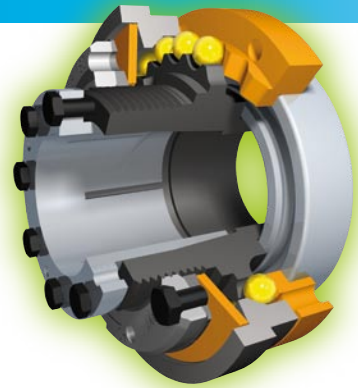
EAS[®]-element clutches in the drives of a tunneling machine



Product Summary

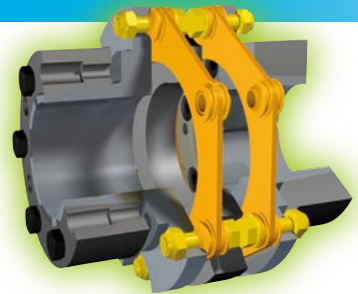
Safety Clutches/Overload Clutches

- **EAS[®]-Compact[®]/EAS[®]-NC**
Positive locking and completely backlash-free torque limiting clutches
- **EAS[®]-smartic[®]**
Cost-effective torque limiting clutches, quick installation
- **EAS[®]-element clutch/EAS[®]-elements**
Load-disconnecting protection against high torques
- **EAS[®]-axial**
Exact limitation of tensile and compressive forces
- **EAS[®]-Sp/EAS[®]-Sm/EAS[®]-Zr**
Load-disconnecting torque limiting clutches with switching function
- **ROBA[®]-slip hub**
Load-holding, frictionally locked torque limiting clutches
- **ROBA[®]-contitorque**
Magnetic continuous slip clutches



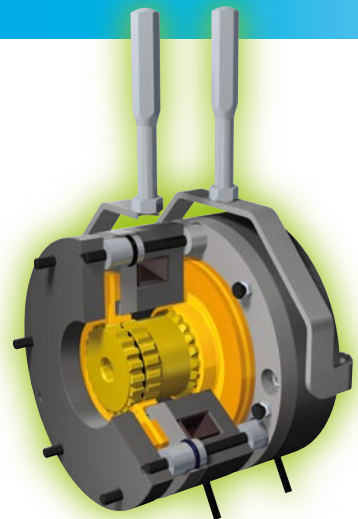
Shaft Couplings

- **smartflex[®]**
Perfect precision couplings for servo and stepping motors
- **ROBA[®]-ES**
Backlash-free and damping for vibration-sensitive drives
- **ROBA[®]-DS/ROBA[®]-D**
Backlash-free, torsionally rigid all-steel couplings
- **EAS[®]-control-DS**
Cost-effective torque-measuring couplings



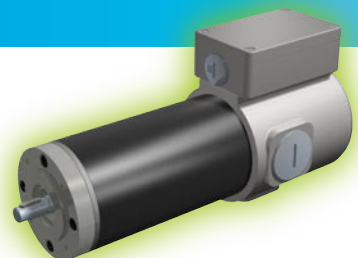
Electromagnetic Brakes/Clutches

- **ROBA-stop[®] standard**
Multifunctional all-round safety brakes
- **ROBA-stop[®]-M motor brakes**
Robust, cost-effective motor brakes
- **ROBA-stop[®]-S**
Water-proof, robust monoblock brakes
- **ROBA-stop[®]-Z/ROBA-stop[®]-silenzio[®]**
Doubly safe elevator brakes
- **ROBA[®]-diskstop[®]**
Compact, very quiet disk brakes
- **ROBA[®]-topstop[®]**
Brake systems for gravity loaded axes
- **ROBA[®]-linearstop**
Backlash-free brake systems for linear motor axes
- **ROBATIC[®]/ROBA[®]-quick/ROBA[®]-takt**
Electromagnetic clutches and brakes, clutch brake units



DC Drives

- **tendo[®]-PM**
Permanent magnet-excited DC motors
- **tendo[®]-SC**
1 quadrant and 4 quadrant transistor controllers





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You can find the complete address for the representative responsible for your area under www.mayr.com in the internet.