

## ECO OKL Magis More than just a door handle



■ SYSTEM TECHNOLOGY FOR THE DOOR





### Designed for handling

ECO door handles accompany you throughout the day. In the office, on your travels or simply at home, you come into contact with them everywhere – indeed it is no exaggeration to claim that the door handle is one of the most used functional objects in any building.

Naturally this brings certain demands, not just in terms of **the look and feel** of the door handle but also where function and safety are concerned. ECO Schulte understands these requirements perfectly and constantly uses its **innovative new developments and modifications** to create new momentum in the market.

#### ECO Schulte: Your fittings specialist

Over the last 50 years we have learned that an active approach to the standards and growing demands of the user is the only way to open the door to greater safety. 30,000,000 door handles have left our works in these five decades, and are now opening doors across the world and laying an important foundation for additional security in all types of building.

We have made good use of the **experience** gained from the development and production of these many millions of door handles and with the new ECO OKL Magis (latin: magis = more) we have developed our internationally successful OKL ball bearing technology still further with your needs in mind.

## When it can be MORE ECO OKL Magis ball bearing technology. Quality bearings with smooth latch operation



ECO uses the high quality OKL Magis ball bearing technology for products in the premium segment. This precision ball bearing unit is a distinctive feature of these high quality fittings. A precise, maintenance-free, fully cased, grooved ball bearing system together with the flexible bearing ensures a smooth, play-free handle operation that can be adjusted to fit any door.

OKL latches have undergone more than one million application cycles at independent test institutes with no problems. They have been certified according to **EN 1906**, usage category 4, approved for fire protection in accordance with **DIN 18273** and are also available in the corrosion class 5.

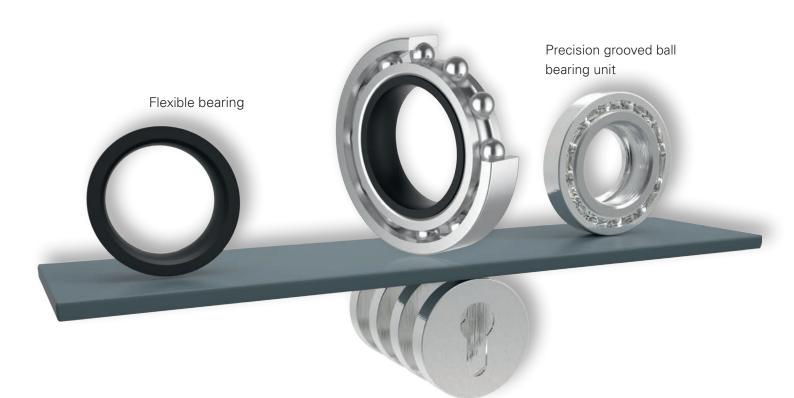
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B/U

OKL - premium fittings							
Magis	<ul> <li>EN 1906, Usage category 4</li> <li>DIN 18273 approved for fire and smoke protection doors</li> <li>Corrosion class 5</li> <li>Fixed sleeve nuts</li> <li>EN 179 depending on latch model</li> <li>Grooved ball bearing unit</li> <li>Flexible bearing</li> <li>Carrier 90° swing</li> <li>Return springs</li> <li>1 million test cycles</li> </ul>	Cla 4	ssificat	tion k	ey EN	1900	6





# Perfectly balanced in function, design and practice

With new, well designed functions we can guarantee that certain something MORE: whether it is the clean, minimalist design that fits harmoniously into sophisticated door concepts while at the same time setting discreet style accents, or the new flexible bearing - patent pending - which adjusts to ensure a perfect fit on any door.

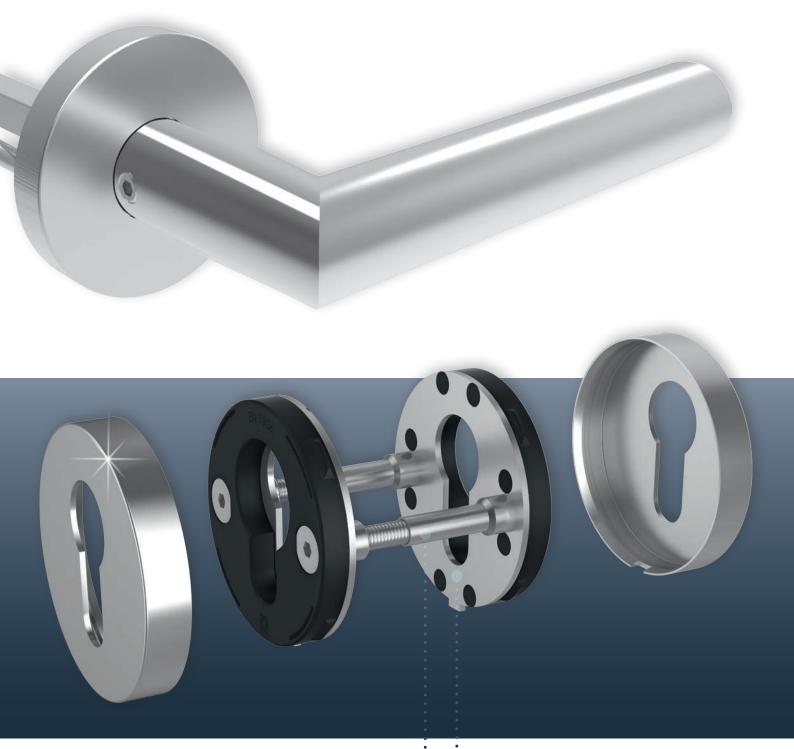
## Sophisticated design with visual elegance

Clean lines and perfect curves are the distinguishing features of the new generation of rosettes from ECO Schulte.

meet to form a rounded unit in this sophisticated design.

Rosette dimensions from 9 mm • also allow the use of standard length profile cylinders.





## **Steel supporting cams with internal ...: screw threads** are fixed to the steel base rosette, guaranteeing a firm seat and making installation easier.

#### The cover rosette

made from special plastic is fixed to the steel base rosette to form a stable unit

## An innovative milestone on the door: ECO OKL Magis

The new generation of rosettes from ECO Schulte hides **the new, innovative OKL Magis ball bearing technology.** In developing this new generation we have deliberately concentrated on the basics. Magis

The high quality latch offers full clearance. Integrated return springs support the returning mechanism of the lock. A wave spring washer levels out the axial play of the bearing.

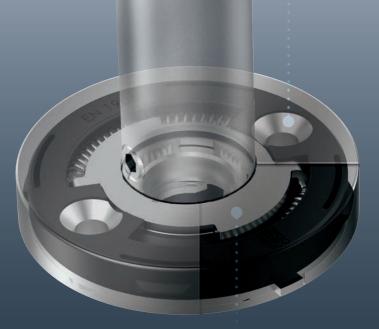


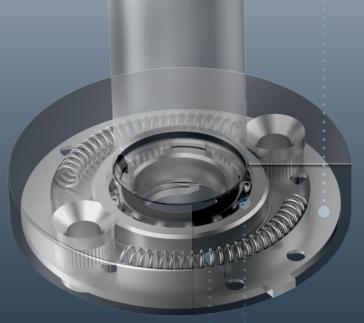


#### Steel base rosette

precision-engineered for the grooved ball bearing unit in the 1/100 mm range.

**Countersunk Allen screws** Easy to screw in, even in awkward corners. The **blue Tuflok coating** ensures outstanding vibration protection and excellent torque consistency.







Always 90° thanks to the fixed stop and compression springs.

MALES



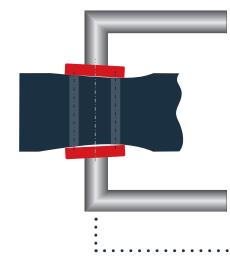
Flexible bearing set into the ball bearing unit.



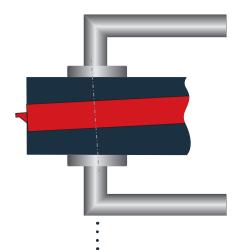
### Stable yet flexible Mobility on the door

The **new** ECO **flexible bearing** easily solves all the common problems of handle installation:

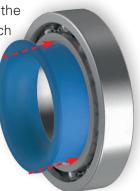
 Screws done up too tight (deformation of door surface)

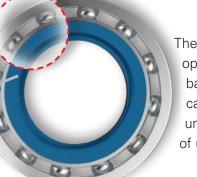


 Tolerance errors in lock installation (lock casing askew)



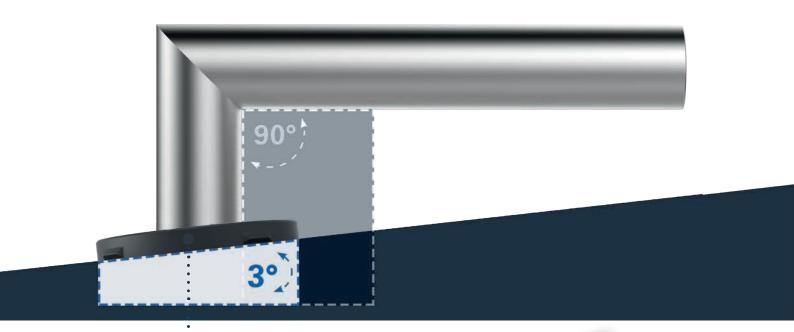
The flexible bearing sits neatly in the ball bearing unit and gives the latch the mobility to make the necessary adjustments.





The flexible bearing operates within the ball bearing unit and can compensate for uneven door surfaces of up to 3°.





**DIN 18273 : 1997-12:** Construction hardware - door handle fittings for fire protection doors and smoke protection doors – Definitions, Sizes, Requirements and Tests, Annex A.

#### **Technical information**

**Radial and axial play:** This latch can compensate for uneven door surfaces of up to 3°, however **DIN Standard 18273** refers to possible

play: "Due to the tolerance fields of door handle pins (8.91 to 8.98 mm) and the inner square of the nut (9.0 to 9.1 mm) there can be a considerable amount of play between the door latch square and the locking nut. This play can lead to a maximum rotation of the installed latch of 5 mm, measured in a distance of 100 mm from the pivot point of the handle."<sup>1</sup> In the case of two part panic pins in particular this play can be unavoidable.

This means that the door handle can waggle slightly up and down. The ECO OKL Magis door latch fitting prevents this from happening because it has a return spring setting with 90° fixed stop. The sense of play in the handle is thus significantly reduced and it far exceeds the requirements of standard **EN 1906**.

### The highlights of the ECO OKL Magis range



#### Precision grooved ball bearing unit in premium quality

The ECO Magis premium fittings contain a double-cased precision grooved ball bearing unit. This gives the latch a stable, accurate rotation movement. The durable ball bearing unit ensures smooth, play-free handle operation.



#### Flush appearance and flexible adjustment

The flexible bearing used in the ECO Magis works inside the ball bearing unit. The patented flexible bearing makes it possible to compensate for severely uneven door surfaces.



#### No tilting

The fixed stop ensures that the door handle always sits at  $90^{\circ}$ . Even in the case of locks without strong return springs, the latch always stays in this  $90^{\circ}$  position after use. Two springs provide the necessary counterpressure. This complies with model type **B** of **EN 1906**.



#### Well designed installation system

Supporting cams with internal threads are used to make installation easier. These are firmly fixed to the base rosette.



#### Innovative screw technology

The door handle fittings are screwed in place using countersunk Allen screws, which means that even in extreme cases in awkward corners it is possible to use an Allen key for installation. The Tuflok coating provides vibration protection and consistent torque.



#### Smooth surface

The popular, corrosion-resistant structure in matt stainless steel, which is used all over the world, was an obvious choice for this premium hardware. The smooth surface gives these ECO fittings a perfect look and a perfect feel.



#### Sustainable and durable

ECO Schulte values durability and sustainable construction and complies with such standards as the Environmental Product Declaration ISO 14025 and EN 15804. Naturally the ECO OKL Magis product range also has EPD certification.



#### **Fire-resistant**

All models of the ECO OKL Magis premium fittings range are also available in fire protection mode. Here ECO provides the highest classes according to **EN 1906** and **DIN 18273**.

#### **Corrosion-resistant**

ECO OKL Magis fittings are supplied in the highest corrosion class 5, according to **EN 1906** usage category 4. This means that these handles can also be used in areas of extreme corrosion requirements.

#### Standardised quality

Like all other ECO products, the ECO OKL Magis premium fittings are tested and approved according to standard **EN 1906**, but to a far greater degree than required! The durability function has been tested with over one million cycles - according to **EN 1906** only 200,000 cycles are required. The free play and the free corner movement also clearly exceed the maximum values demanded by this standard.







## ECO OKL Magis: Tangible variety Which handle will you choose?

Naturally it is possible to combine a large selection of knob and latch models from ECO Schulte with our new rosette.



D-310



D-410

D-510







More special latch or knob designs can be made, even for small properties. These can be developed exclusively for you on demand. Enquiries welcome!

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