For electrical opening of handle-less, integrated refrigerators



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# Entirely handle-less kitchen design

In kitchens with minimalist, handle-less designs, integrated refrigerators, freezers and dishwashers can too now disappear stylishly behind furniture fronts. The SERVO-DRIVE flex electrical opening support system ensures easy opening.

www.blum.com/sdflex

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# Flexible options for use

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Left or right opening, sliding or fixed door – regardless of the installation situation, SERVO-DRIVE flex can be used with standard integrated refrigerators, combination fridge/freezers, freezers and dishwashers.



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# **Versatile applications**

Various installation situations can be implemented with the SERVO-DRIVE flex electrical opening support system. The drive unit is suitable for various applications.



Each door in the combination fridge/freezer is fitted with a separate SERVO-DRIVE flex unit and can therefore be opened individually.



Large and heavy doors, e.g. freezer doors, open with two synchronised drive units reliably and at the same time.



For refrigerators, an optional wireless switch can be used to expand the trigger range on the front. Whichever part of the front is pressed, opening the door is always convenient.



If SERVO-DRIVE flex is used with integrated dishwashers, the drive unit is mounted in the centre of the installation recess.

## **Intelligent functions**

SERVO-DRIVE flex is a well-conceived system which is designed specifically to suit the demands of everyday kitchen use. Thanks to the intelligent functions, handle-less integrated devices can be operated easily and conveniently.

## **Ablum**

#### Lean protection

SERVO-DRIVE flex differentiates between short pressing actions and longer leaning actions. The lean protection prevents accidental triggering of the opening support system.

#### Adaptive system

SERVO-DRIVE flex can be adapted to suit the door properties. This means the access gap is always the same size and the door can be opened reliably.

# Automatic self-closing system

If the door is not fully opened after triggering the opening support system, the magnetic rod pulls the front shut again. This ensures that the door does not remain open accidentally.

## Trigger safety

After opening, the rod retracts into the drive unit. The user's working area remains free because the opening function is not triggered again until pressure is applied to the front.



# Easy assembly and installation

SERVO-DRIVE flex is mounted easily and conveniently in just a few steps. If the drive unit needs to be accessed subsequently, the front of the installation recess can simply be unclipped.



#### Attach mounting plate

Start by screwing in a mounting plate to both the left-hand and right-hand sides in the installation recess.



#### **Clip on drive unit**

The drive unit can be clipped onto the left or right mounting plate, depending on the door opening.

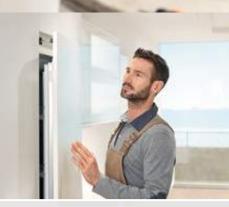


Connect power supply The cabled SERVO-DRIVE flex unit is connected to the power supply.



## Mount the front

The front can be clipped directly onto the mounting plates which have already been installed when the unit was mounted.



#### Synchronise the drive unit

During the reference run, the drive unit adjusts itself to the installation situation. SERVO-DRIVE flex is now ready for use.



View assembly film www.blum.com/ sdflex\_videos

# Other single applications for SERVO-DRIVE

In addition to SERVO-DRIVE flex, other single applications exist for the tried-and-tested easy-to-use SERVO-DRIVE system. For example, waste bin pull-outs or individual lift systems in wall cabinets can be fitted with an electrical system.

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www.blum.com/singleapplications



# SERVO-DRIVE uno for waste bin pull-outs

Use your hip, knee or foot – a short press on the front is all it takes and the pull-out opens automatically. SERVO-DRIVE uno for waste bin pull-outs is a convenient retrofitting solution and can be mounted in just a few simple steps.



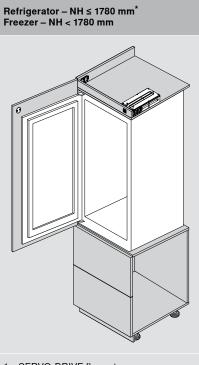
#### **SERVO-DRIVE uno for AVENTOS**

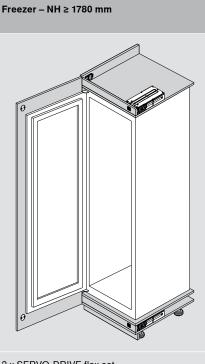
If just one lift system is to be fitted with an electrical system, SERVO-DRIVE uno for AVENTOS is the ideal motion support system for the wall cabinet. Individual lift systems can be opened with a light touch and closed silently and effortlessly with BLUMOTION.

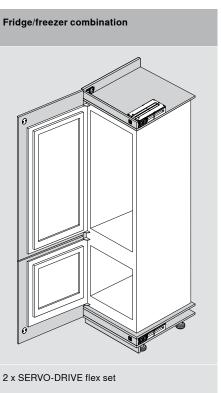


## **Order specification**









1 x SERVO-DRIVE flex set

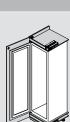
2 x SERVO-DRIVE flex set

\* Refrigerators with reinforced magnetic sealing lips and therefore higher closing force may require a second drive unit. A trial application is recommended.



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	Ordering for one unit
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	ordering for one unit		
•	SERVO-DRIVE flex set 1x	Z10C500A	
	Blum 12W plug-in transformer (see table on page 16) 1x	ත Z10NA30(xy)F	



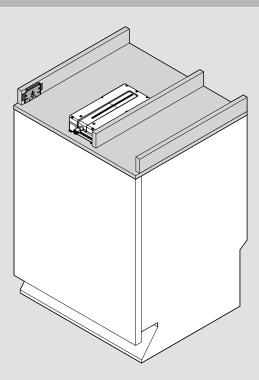
	Ordering for two units		
7	SERVO-DRIVE flex set 22	х	Z10C500A
	Blum 24W transformer (application for more than one unit, see table on page 16)	x	Z10NE030x
	Flex (see table on page 16)		Z10M200x
	Transformer unit housing for cabinet underside fixing 12	х	Z10NG000
	Alternative: transformer unit housing for panel fixing	x	Z10NG120
	Synchronisation cable 300 cm, R7035 light grey (only for freezers with a height of 178 cm)		Z10K300A
	Connecting node (1x), Cable end protector (2x)		Z10V100E.01
7	Black distribution cable for cutting to size		Z10K300A
	Cable holder		Z10K0009
	Recommended for the fridge/freezer combination:		
	SERVO-DRIVE switch		21P5020
	Wireless receiver		Z10C5007

## **Order specification**

**SERVO-DRIVE flex** 



#### Dishwasher



Ordering for dishwashers	
SERVO-DRIVE flex set drive unit 1 x	Z10C500A
Blum 12W plug-in transformer (see table on page 16) 1 x	ත Z10NA30(xy)F
Additional mounting plate for use with dishwashers 1 x	Z10C5005

APL-UKBottom edge of work topsAPÜProtrusion of work tops

## **Order specification**

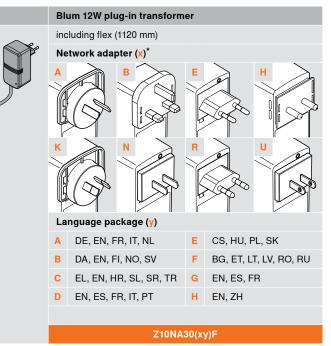
## **Ablum**

	Flex	
	Countries	
and here	Flex Europe 10 pieces	Z10M200E
- Ve	Flex CH 10 pieces	Z10M200C
	Flex US, CA 10 pieces	Z10M200U
	Flex JP 10 pieces	Z10M200J
	Flex BR 10 pieces	ත Z10M200S.01
	Flex UK 10 pieces	Z10M200B
	Flex DK 10 pieces	Z10M200D
	Flex IL 10 pieces	Z10M200I
	Flex AU 10 pieces	Z10M200K
	Flex CN 10 pieces	Z10M200N
	Flex AR 10 pieces	Z10M200A
	Flex IN 10 pieces	ත Z10M200H
	Flex CL 10 pieces	Z10M200L
	Flex TW 10 pieces	Z10M200T
	Flex ZA 10 pieces	Z10M200Z
	Flex Europe without plug 10 pieces	Z10M200E.OS

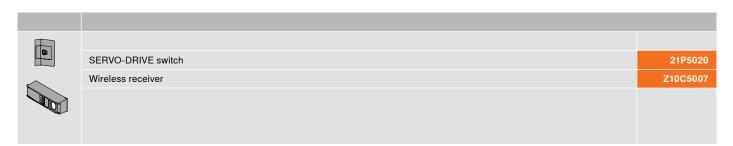
### Blum transformer

24W

Language packages – assembly and instruction leaflet		
DE, EN, FR, IT, NL	Z10NE030A	
DA, EN, FI, NO, SV	Z10NE030B	
EL, EN, HR, SL, SR, TR	Z10NE030C	
EN, ES, FR, IT, PT	Z10NE030D	
CS, HU, SK, PL	Z10NE030E	
BG, ET, LT, LV, RO, RU	Z10NE030F	
EN, ES, FR, (US, CA)	Z10NE030G	
EN, ZH	Z10NE030H	
Only 1 Blum transformer permitted per distribution cable!		



\* Not permitted for more than one drive unit!

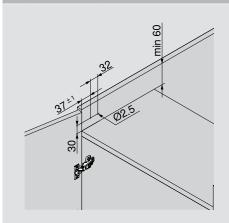


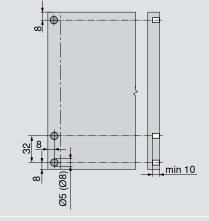
## Planning and assembly for refrigerators and freezers

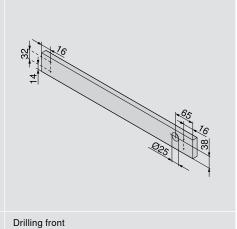
SERVO-DRIVE flex



#### Preparation/drilling



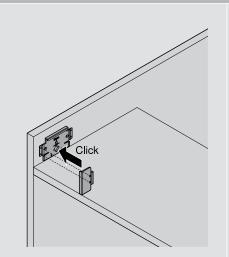


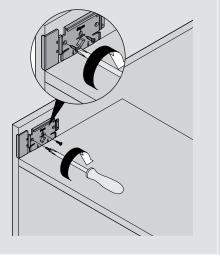


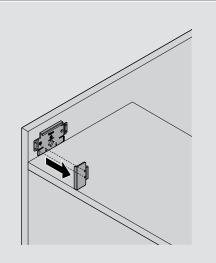
Drilling for mounting plate

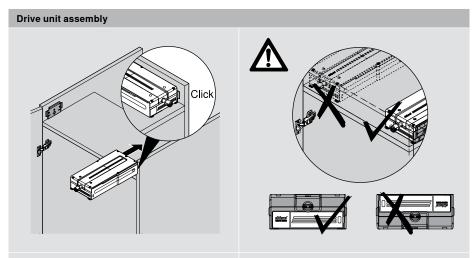
Drilling front for bumper

Assembly using assembly jig

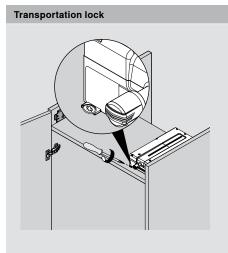








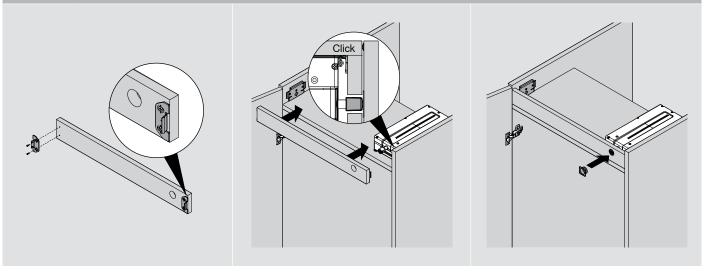
Important notes!



## Assembly for refrigerators and freezers

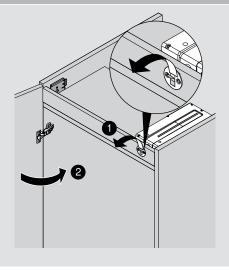


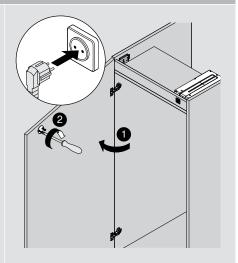
Front assembly

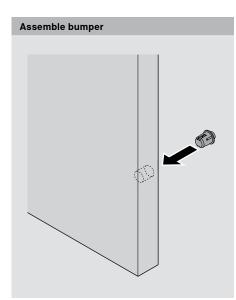


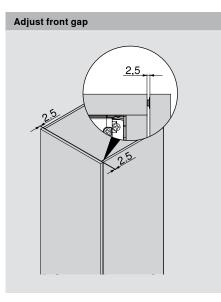
Catch plate assembly



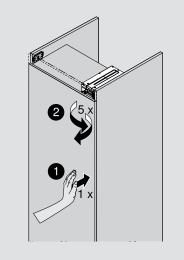








Reference run for start-up

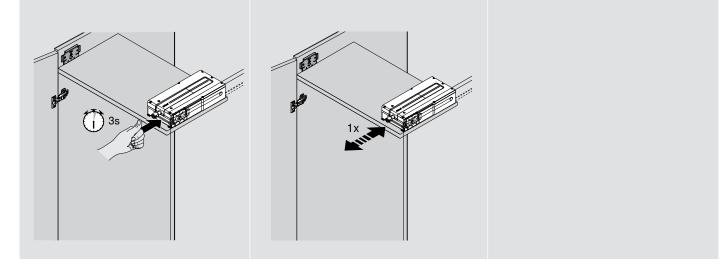


## Removal for refrigerators and freezers

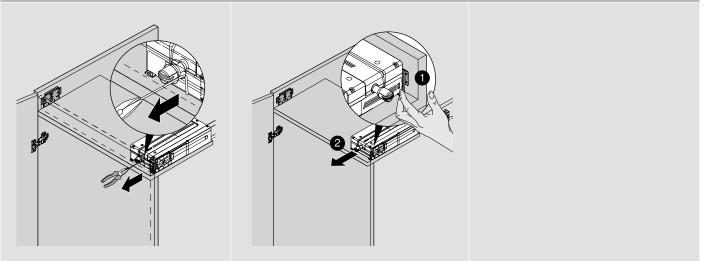
SERVO-DRIVE flex



#### Reset SERVO-DRIVE unit



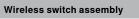
#### Removal

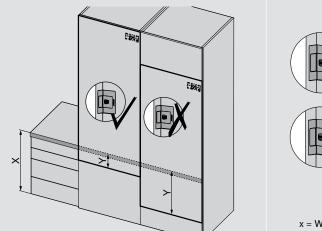


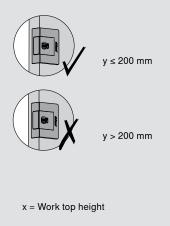
## Wireless switch assembly (optional)

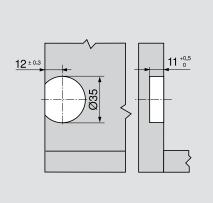


Recommendation for using wireless switch

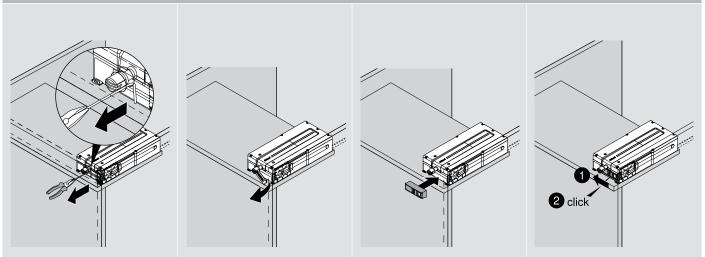


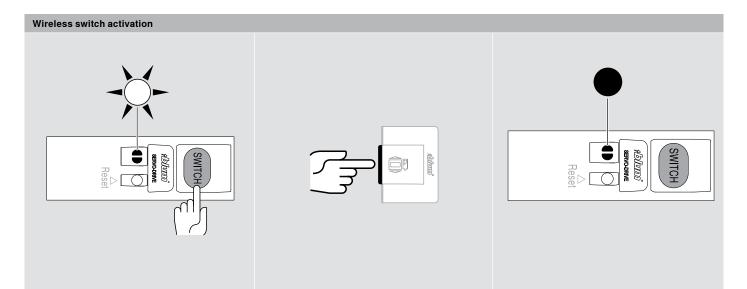






Wireless receiver assembly



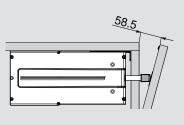


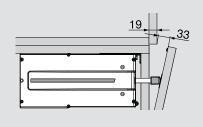
## Installation options

**SERVO-DRIVE flex** 



#### Access gap – measurements





#### **General notes**

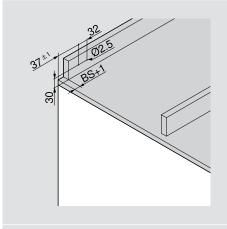


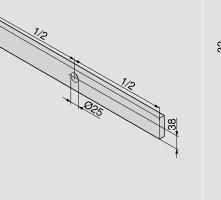
If the door of the device is left open for a relatively long time, for example when putting away shopping, negative pressure may be created inside the refrigerator or freezer after it has been closed. This may result in it not being possible to open the door of the device for a few seconds. This negative pressure normally disappears after a short amount of time and the opening function becomes fully operational once again.

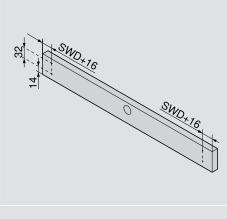
## **Dishwasher planning and assembly**



Preparation/drilling



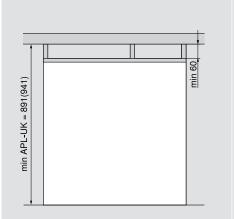


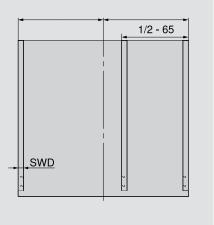


Drilling for mounting plate

BS 16-19 mm

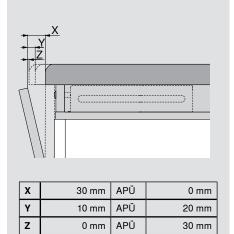
#### Drive unit planning





Drilling front

Access given protrusion of work tops



#### Front assembly – do not assemble bumpers



Bumpers must not be installed in dishwashers that have SERVO-DRIVE flex.

NH Recess height

BS Front thickness

SWD Side panel thickness

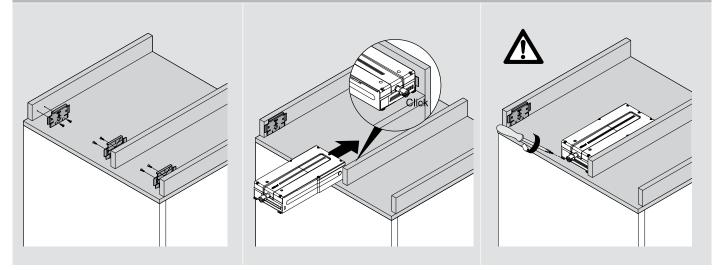
APL-UKBottom edge of work topsAPÜProtrusion of work tops

## **Dishwasher assembly**

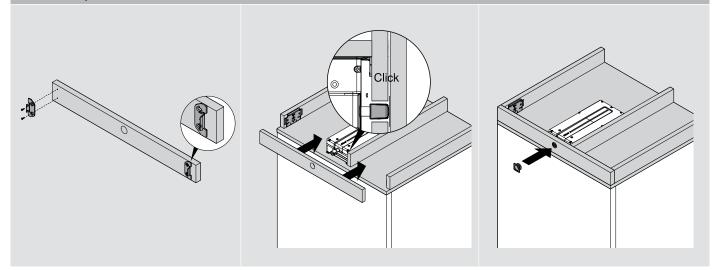
SERVO-DRIVE flex

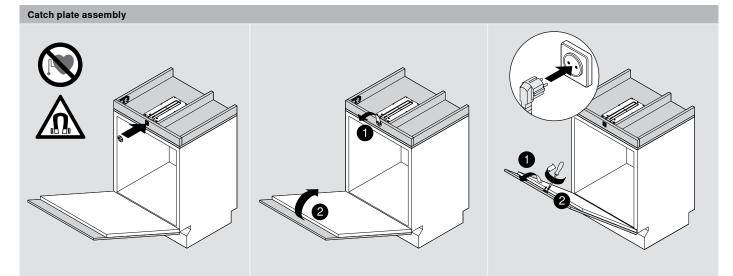


#### Drive unit assembly



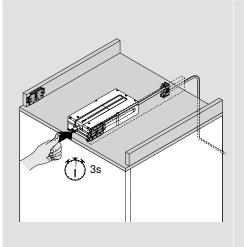
Front assembly



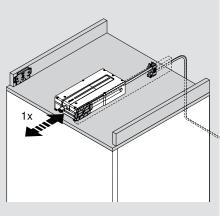


## Dishwasher removal / cabling





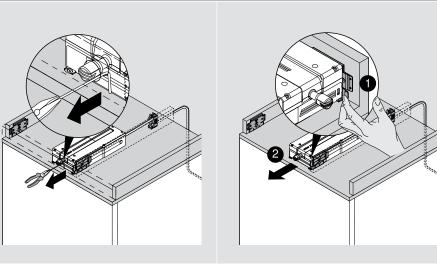
Reset SERVO-DRIVE unit



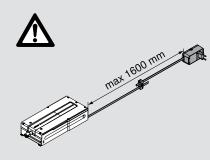
The front must be closed manually.

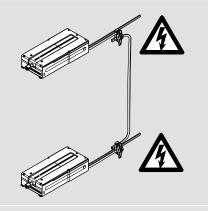
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Removal



Cabling/information





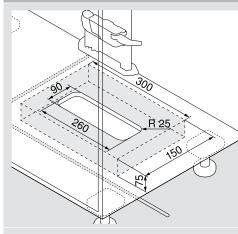
Black = power supply Light grey R7035 = communication (synchronisation cable)

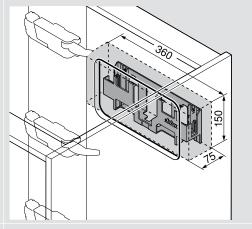
## **Assembly Blum transformer**

## **SERVO-DRIVE flex**



#### Space requirement + safety distance for transformer unit housing



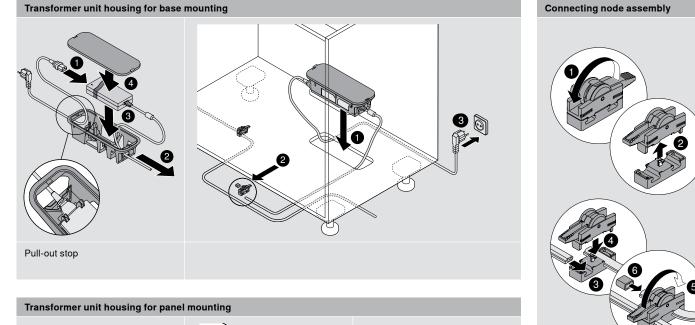


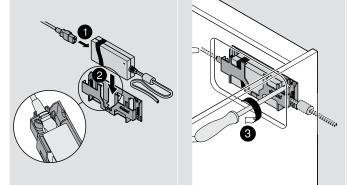
#### Note:

Maintain a 30 mm safety distance from the bottom edge (base mounting) and/or front edge (panel mounting) and side edges of the transformer unit housing to the neighbouring elements to allow for air circulation; otherwise, there is a risk that the Blum transformer could overheat.

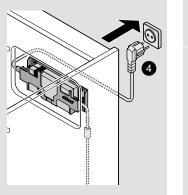
Base mounting

Panel mounting





Pull-out stop



Do not damage piercing pins!

## The company Blum

Founded over 60 years ago by Julius Blum, Blum is a family-owned company that operates on an international scale. Its strategic business segments include lift, hinge and pull-out systems. All our product developments focus on perfecting motion.

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Ablum



## Blum in Austria and around the world

The company has seven plants in Vorarlberg, Austria, additional production sites in Poland, the USA and Brazil and 29 subsidiaries/representative offices. Blum supplies more than 120 markets. The Blum Group employs 7.300 people in total, 5.500 of whom work in Vorarlberg.



#### **Global customer benefits**

"Whether manufacturer, distributor, fitter or kitchen user – everybody should personally enjoy the benefits of Blum products" – that is Blum's philosophy on global customer benefits.



#### Innovations

To support customers with innovative fittings solutions and secure long-term success for the company, we need to consistently invest in research and development, in plants and facilities and in employee training. With more than 2.600 patents worldwide, Blum is one of Austria's most innovative companies.



#### Quality

Blum's comprehensive concept of quality does not only apply to products. Services and collaboration with customers and partners should also meet the same quality requirements.



#### Environment

At Blum, we believe that responsible ecological behaviour has long-term economic benefits. The longevity of products is just one of many important aspects. Other important measures include the use of environmentally-friendly processes, the intelligent use of materials and prudent energy management.

SO 14001





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#### **DYNAMIC SPACE**

Good workflows, optimum use of storage space and top quality motion are important features of a practical kitchen. Blum's ideas for practical kitchens are designed to bring function, convenience and ergonomics to furniture interiors.

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