# Forma 5

# **TECHNICAL FEATURES**

# **EBEN**



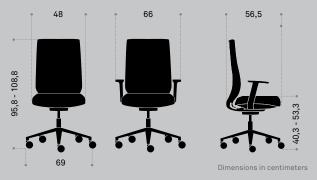
For anti-electrostatic solutions, please ask us the conditions.



#### DIMENSIONS

Height	<b>95,8 - 108,8</b> cm
Seat height	<b>40,3 - 53,3</b> cm
Width (without arms / with arms)	<b>48 - 66</b> cm
Depth	<b>56,5</b> cm
Weight (without arms / with arms)	<b>14,67</b> kg
Fabric meters	<b>0,55</b> m

<sup>\*</sup> These minimum and maximum dimensions depend on the chosen configuration. Please ask for concrete values in case you need them.



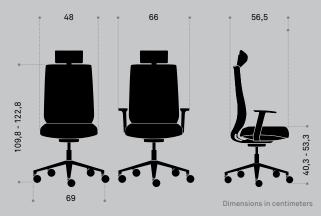
# SWIVEL CHAIR | MESH BACKREST WITH HEADREST



#### DIMENSIONS

Height	<b>109,8 - 122,8</b> cm
Seat height	<b>40,3 - 53,3</b> cm
Width (without arms / with arms)	<b>48 - 66</b> cm
Depth	<b>56,5</b> cm
Weight	<b>16,24</b> kg
Fabric meters	<b>0,65</b> m

<sup>\*</sup> These minimum and maximum dimensions depend on the chosen configuration. Please ask for concrete values in case you need them.



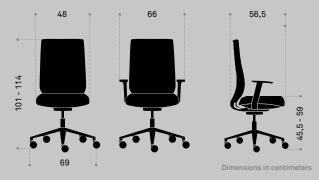
# SWIVEL CHAIR | UPHOLSTERED BACKREST



#### DIMENSIONS

Height	<b>95,8 - 108,8</b> cm
Seat height	<b>40,3 - 53,3</b> cm
Width (without arms / with arms)	<b>48 - 66</b> cm
Depth	<b>56,5</b> cm
Weight	<b>17,39</b> kg
Fabric meters	<b>1,85</b> m

<sup>\*</sup> These minimum and maximum dimensions depend on the chosen configuration. Please ask for concrete values in case you need them.



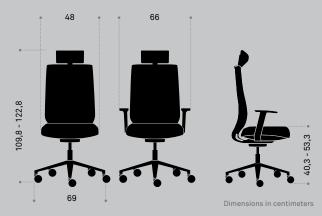
# **SWIVEL CHAIR** | UPHOLSTERED BACKREST WITH HEADREST



#### DIMENSIONS

Height	<b>109,8-122,8</b> cm
Seat height	<b>40,3-53,3</b> cm
Width (without arms / with arms)	<b>48 - 66</b> cm
Depth	<b>56,5</b> cm
Weight	<b>19,071,95</b> m
Fabric meters	

<sup>\*</sup> These minimum and maximum dimensions depend on the chosen configuration. Please ask for concrete values in case you need them.



### **ELEMENT DESCRIPTION**

#### **BACKREST**

"V"-shape perimetral polyamide (black in case of upholstered backres, choose betwen polar white o black for mesh backrest) frame reinforced with fiber glass. Polypropylene piece adjusted to the outer frame to support the mesh or the polyurethane foam, 70 kg/ m³ density. The backrest and mechanism are fixed together through a polished injected aluminium piece. Lumbar support by a ribbon accessible from the back side of the backrest in the upholstered version. Polished, painted polar white or painted matt black aluminium support to fix the headrest to the backrest. The headrest consists of a polyamide bracket and polypropylene plate incorporates a polyurethane foam density 70 kg/m³ and is upholstered in the same fabric and color as the seat. The headrest structure will be always in black, regardless of the colour of backrest frame.



Mesh backrest

#### **LUMBAR SUPPORT**

MESH LUMBAR SUPPORT: formed by separate pieces of polyamide with 30% glass microspheres, vertically adjustable and the possibility of asymmetric adjustment ensuring permanent contact in the lower back. The pieces generate a tension in the mesh which is the working principle of the system.

UPHOLSTERED SUPPORT: The upholstered version has a polypropylene hidden ribbon that adjust the lumbar area, operable from its side back part.





Lumbar support

#### **SEAT**

Structured by an injected polypropylene shell, textured in the outer part with inner tray that works as support to over-mould the flexible polyurethane foam 65 kg/m³ which will be upholstered later.

IIn both sides of the seat for integrate synchro atom chairs, there are 3 buttons integrated to adjust the chair. To the right, there is the height adjustment button and to the left the depth adjustment of the seat, and the leaning blocking funciton for the backrest, closer to the front edge of the seat. A serigraphy in each one shows the funcion of each button. They are in an ergonomic height, perfect for its use.



#### **ARMS**

The chair may be ordered without arms optionally. They have ergonomic qualities for a better rest of the arms. 2 options are offered:

Fixed: "T" shape fixed arms, made of black polyamide, with polished aluminium support.

1D adjustable: with polypropylene structure and polyurethane armpads. Easy adjustment of height. Dimensions: 250 x 90 mm.

3D adjustable polyamide arm support: with polyamide structure reinforced with fiberglass and soft-touch polyurethane armrest. Easy adjustment of height, depth and turn.

3D adjustable aluminium arm support: with injected aluminium structure and polyurethane armpads. Easy adjustment of height, depth and turn.

4D adjustable: with injected aluminium structure and polypropylene armrests. Easy adjustment: height, depth, width and rotation. 235 x 105 mm.



Fixed arm



3D adjustable polyamide



4D adjustable arm



1D adjustable arm



3D adjustable aluminium arm support

#### **MECHANISM** [swivel chairs]

GAS: height adjustment by gas with lift.

**SLIDING SEAT:** Optional seat depth adjustment for all the swivel chairs with Synchro Atom mechanism, and standard for chairs with integrated Synchro Atom.



**SYNCHRO ATOM:** rotation of the backrest relative to the seat, with the rotation center located above the seat surface, ensuring an optimal movement during the reclination. Height adjustment by a handle. The mechanism tension adapts automatically to the weight of the user (for people between 45 and 110 kg). The backrest may be fixed by using a handle. As option, there are five different positions to adjust the seat depth or Trasla.

Seat height adjustment by a button for an optimal adjustment of the user.

The backrest fixation is operated by a button: inwards allows the movement, and outwards to fix the backrest.



**SYNCHRO MOTION:** 24° backrest leaning and 10° on the seat. Backrest leaning and seat rotation according to a 2,4:1 fixed ratio. Backrest tension or hardness adjustment. Easy adjustment with only two turns. The resistance of the knob is constant, regardless of reduce or increase the tension. Infinite tension positions of the backrest for an optimal adjustment to users between 45 and 120 kg. Forward rotation axis that prevents for pressure on the user's legs. 5 blocking positions of the backrest with anti-return protection. Discrete aesthetic that favors the chair.



Synchro Atom: accessed by some levers placed below the seat. Optional Sliding Seat mechanism.



Integrated Synchro Atom: accessed by bottoms placed at both sides of the seat. Included Sliding Seat mechanism.



Synchro Motion: accessed by knob and handle. Optional Trasla mechanism.

### **BASE**

**POLYAMIDE STAR:** 64 or 69 cm diameter. 5 trapezoidal branches with rounded corners.

**POLISHED ALUMINIUM OR WHITE ALUMINIUM STAR:** 64 or 69 cm diameter. 5 trapezoidal branches with rounded corners.



Polyamide star D69cm



Polished aluminium star D69cm base



White painted aluminium star D69cm base

#### FLOOR SUPPORT

2 floor support options:



Roulette double galet 65 mm



Roulette double galet sol dur 65

#### **UPHOLSTERY**

Seat available for all the fabrics range of Forma 5, including a wide range of fabrics (yarn, fireproof fabrics) and leathers. Backrest available with mesh or all the range of Forma 5 fabrics. Consult fabrics brochure and Forma 5 Pricelist. The Group 1, 2, 3 and 5 fabrics of Forma 5 are supplied by the manufacturer company Camira. Although our fabrics brochure includes a selection of the Camira fabrics, if the customer requires another specific, Forma 5 will upholster any of its fabrics in any fabric from Camira catalog.

#### **PACKING**

As standard, the chair goes assembled and protected with a plastic packing. For further packaging options, please ask us.

### **ERGONOMICS**

TAKING CARE OF OUR BODY DOES NOT ONLY DEPEND ON GOOD NUTRITIONAL HABITS AND SPORT. THERE ARE OTHER FACTORS THAT CAN INFLUENCE HEALTH, LIKE A CORRECT POSITION AT THE WORKSTATION. FOR THIS REASON, TO KEEP THE BODY IN A GOOD SHAPE AND FREE OF PHYSICAL DISORDERS IT IS NECESSARY TO HAVE GOOD FURNITURE AND KNOW HOW TO USE IT CORRECTLY.



#### **CHAIR WITH HEIGHT ADJUSTMENT**

Chairs should have an option to lift or lower the seat's height, through a mechanical or a pneumatic system. The position will be the correct one, when the feet rest firmly on the floor and the thighs remain in a horizontal position.

The mechanism should be easily accessible from a seating position.



#### SEAT AND BACKREST LEANING

The chair should include a mechanism to control the seat leaning movement and keep a well-balanced position at work. The synchro system is the most extended one, but there are other versions which are more advanced, like the Atom synchro. This last one is a Forma 5 exclusive and it self-adjusts to the user's weight



#### **LUMBAR ADJUSTMENT**

Many chairs are designed with an adjustable back support. It is desirable that the backrest may be regulated allowing either free movement or to block the mechanism as desired. Many chairs also include a mechanism to adjust the curvature of the back of the chair providing better comfort and lumbar support.



#### **5 BRANCHES BASE**

To facilitate a movement with less effort and to provide stability and firmness, the base should have 5 support points for the casters.



#### SEAT CONSISTENCY

We spend a long time on the seat, so it should provide firmness and adapt to the user's features. Both the high density foam and the injected foam are very resistant, durable and comfortable.



#### **ADJUSTABLE ARMS**

The user can enjoy several versions of the arm; fixed,1D,2D,3D and 4D.If arm rests are utilised they can help releive pressure on the lower spine.



#### UPHOLSTERY

The upholstery should be chosen depending on aesthetic, location and the environmental conditions under which the chair will be subjected to.

CONSIDERING THE ABOVE MENTIONED FEATURES, HERE ARE SOME COMMENTS ABOUT THE POSITION TO BE ADOPTED WHILE SEATING AT WORK



- 1 The distance between the screen and the eyes should be at least 55 centimeters. The screen should also be located in front of the user and not on one side.
- The upper side of the screen should be located at eye level.
- 3 Thighs should be horizontal. Feet should rest firmly on the floor, having enough space below the desk.
- Breaks should be done often for muscle stretching and moving. Users must change their position every once in a while.
- Eyes should be rested often, so to avoid eyetstrain. For example, focusing on different places and distant objects.



# Life Cycle Analysis Program Eben



RAW MATERIALS			
Raw Material	Kg	%	
Steel	6,54 Kg	36%	
Plastic	5,97 KG	32%	
Aluminium	5,00 Kg	27%	
Uphols./Fulling	0,73 Kg	5 %	

% Recycled materials = 43%

% Recyclable materials = 87%

# **Ecodesign**

Results reached during the life cycle stages



**MATERIALS** 

Aluminium 60% recycled material.

Steel 15%-99% recycled material.

Plastic 30%-40% recycled material.

**Upholsteries** Without COV emissions and certified by Okotext.

**Staff material** Without HCFC and certified by Okotext.

Packings 100% recyclable with inks with no solvents.

# PRODUCT ENVIRONMENTAL STATEMENT





#### **PRODUCTION**

Raw materials use optimization Board, upholstery and steel tubes cut.

Renewable energies use reducing the CO2 emissions. (Photovoltaic pannels)

Energy saving measures in all production process

**COV global emission reduction** of the production processes by 70%.



## **TRANSPORT**

Cardboard use opmitization of the packings

Cardboard and packing materials use reduction

Flat packings and small bulks to optimize the space.

**Solid waste compacter** which reduces transport and emissions.

Light volumes and weights

Transport fleet renewal reducing by 28% the fuel consumption.

**Podwer painting** ecovery of 93% of the non deposited painting

Glue removal from the upholstery

have an internal sewage for liquid waste.

The facilities

**Green points** 

at the factory

Suppliers area reduction
Local market power and less pollution at transport.

100% waste recycling at production process ans dangerous waste special treatment.



# USE

Easy maintenance and cleaning without solvents.

Forma 5 guarantee

The highest quality for materials to provide a 10 year average life of the product.

Useful life optimization

of the product due to a standarized and modular design.

The boards with no E1 particle emission.



# **END LIFE**

**Easy unpacking** for the recyclability or compound reuse.

Piece standarization for the use.

Recycled materials used for products (% recyclability):
Wood is 100% recyclable.
Steel is 100% recyclable.
Aluminium is 100% recycable.
Plastics are from 70 to 100% recyclable.

With no air or water pollution while removing waste.

Returnable, recyclable and reusable packing

Product recyclability 87%

# CHAIR MAINTENANCE AND CLEANING GUIDE

LINES FOR A CORRECT CHAIR CLEANING AND MAINTENANCE, CONSIDERING THE DIFFERENT MATERIALS:

#### **FABRICS**

- 1 Vacuum often.
- Rub any stains with a wet cloth with PH neutral soap. Test first on a hidden spot.
- 3 Alternatively dry foam carpet cleaner can be used.

### **PLASTIC PIECES**

Rub any dirty áreas with a wet cloth with PH neutral soap.

Never use abrasive products.

#### **METAL PIECES**

- 1 Rub any dirty areas with a wet cloth with PH neutral soap.
- 2 Polished aluminium pieces can have their lustre enhanced by rubbing with a dry cloth.

# **LEGAL TERMS**

#### **CERTIFICATES**

Forma 5 certifies that the Eben program has passed all tests provided by our intern Quality Department, as well as the Technological Research Center (TECNALIA) with "satisfactory" results:

UNE-EN 1335-1-2001: Office furniture. Task chairs for offices. Part 1: Dimensions. Defining the dimensions.

UNE-EN 1335-2-2009: Office furniture. Task chairs for offices. Part 2: Security requirements.

UNE-EN 1335-3-2009: Office furniture. Task chairs for offices. Part 3: Security testing methods.

Developed by ITO DESIGN