Forma 5

TECHNICAL FEATURES

EBEN

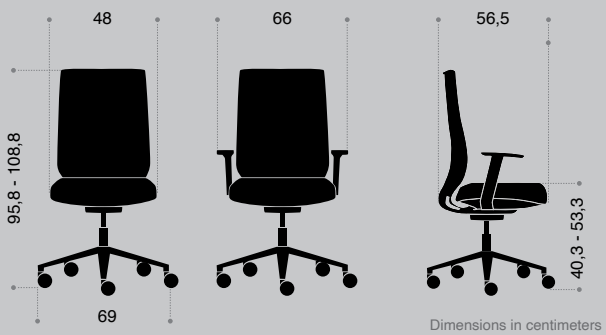
SWIVEL CHAIR | MESH BACKREST

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

DIMENSIONS

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

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



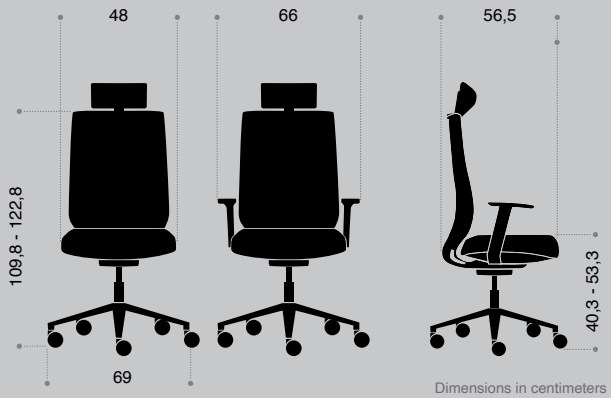
Dimensions in centimeters

SWIVEL CHAIR | MESH BACKREST WITH HEADREST

DIMENSIONS

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

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



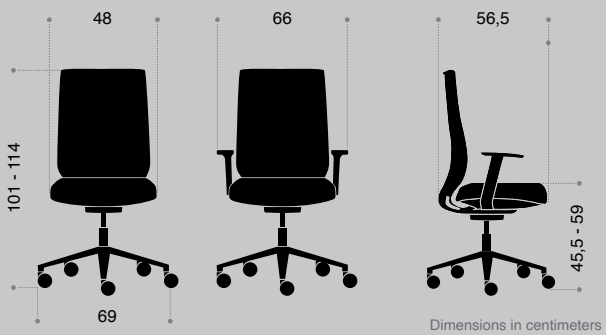
Dimensions in centimeters

SWIVEL CHAIR | UPHOLSTERED BACKREST

DIMENSIONS

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

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



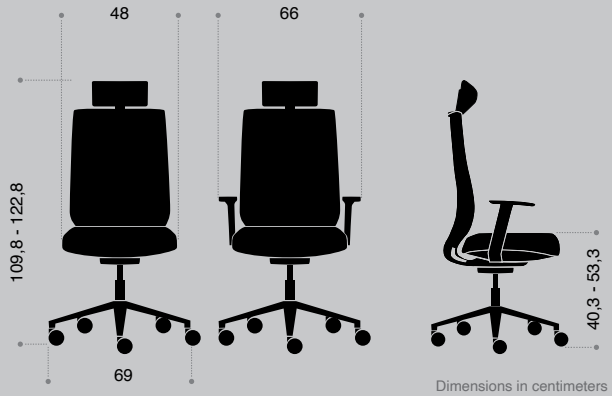
Dimensions in centimeters

SWIVEL CHAIR | UPHOLSTERED BACKREST WITH HEADREST

DIMENSIONS

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

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



Dimensions in centimeters

BACKREST AND SEAT

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/m^3 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. The backrest can optionally have an upholstered headrest adjustable in height (60 mm of adjustment with 7 adjustment points) and inclination (100º angle of inclination with 4 positions that increase or decrease 25º each). The head comprises a support or mast and a structural frame both made of polyamide reinforced with fiber glass, on which the frame coated polypropylene is clipped, upholstered with various types of mesh or upholstered 3D mesh, depending on the option chosen. The color of the headrest structure is always black, regardless of the color of the backrest frame.

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.

SEAT: injected polypropylene shell, textured in the outer side, and inner tray to support the polyurethane flexible foam, 65 kg/m^3 density .

MECHANISM

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.

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. 4 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.

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

OPTIONS

“T” shape fixed arms, made of black polyamide, with polished aluminium support.

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

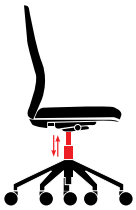
3D adjustable polyamide arm support: with polyamide structure reinforced with fiberglass and soft-touch polyurethane armrest. Easy adjustment in height, depth and turn.

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

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

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.

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.

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.

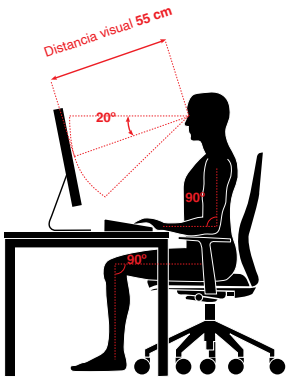
ADJUSTABLE ARMS

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.
2. 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.
4. Breaks should be done often for muscle stretching and moving. Users must change their position every once in a while.
5. 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.

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%.

Podwer painting
ecovery of 93% of the non deposited painting

Glue removal from the upholstery

The facilities
have an internal sewage for liquid waste.

Green points
at the factory

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

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.

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

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.
2. 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