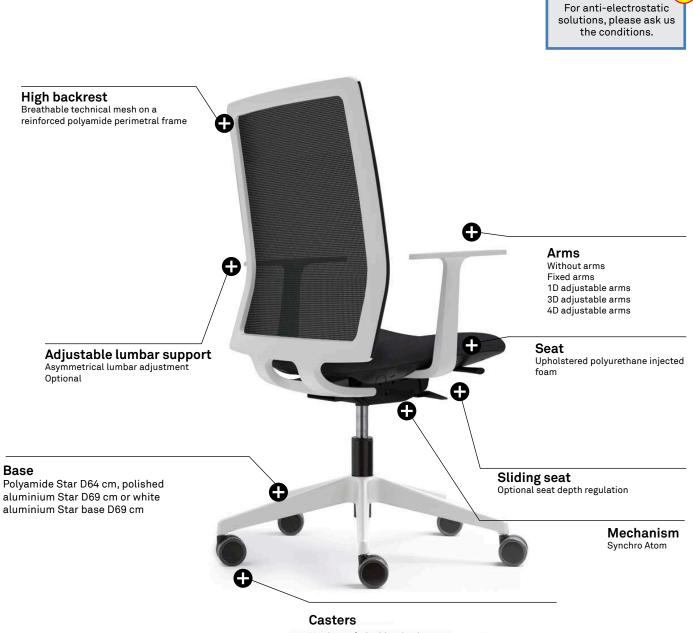
Forma 5

# TECHNICAL FEATURES



## SWIVEL CHAIR | HIGH MESH BACKREST

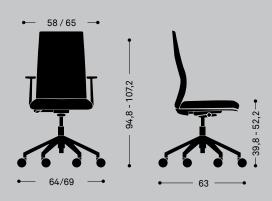


Hard or soft double wheel casters 50 or 65 mm (diameter according to base)

## DIMENSIONS

Height	94,8 - 107,2 cm
Seat height	<b>39,8 - 52,2</b> cm
Width (without arms / with arms)	58 / 65 cm
Depth	<b>63</b> cm
Weight	<b>13,79</b> kg
Fabric meters	<b>0,55</b> m

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



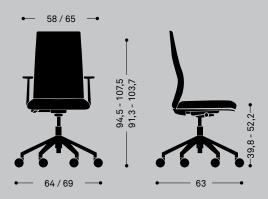
## SWIVEL CHAIR | UPHOLSTERED HIGH OR LOW BACKREST



Hard or soft double wheel casters 50 or 65 mm (diameter according to base)

	Low backrest	High backrest
Height	<b>87,3 - 99,7</b> cm	91,3 - 103,7 cm
Seat height	<b>39,8 - 52,2</b> cm	<b>39,8 - 52,2</b> cm
Width (without arms / with arms)	58 / 65 cm	58 / 65 cm
Depth	<b>63</b> cm	<b>63</b> cm
Weight	18,44	16,96 kg
Fabric meters	<b>1,15</b> m	<b>1,40</b> m

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



Dimensions in centimeters

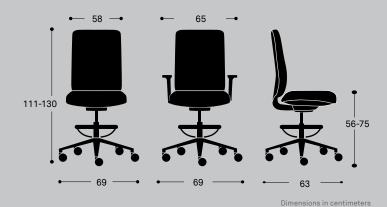
## DRAUGHTSMAN | MESH BACKREST



Hard or soft double wheel casters 50 or 65 mm (diameter according to base)

Height	<b>111 - 130</b> cm
Seat height	56 - 75 cm
Width (without arms / with arms)	58 / 65 cm
Depth	<b>63</b> cm
Weight	<b>16,87</b> kg
Fabric meters	<b>0,55</b> m

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



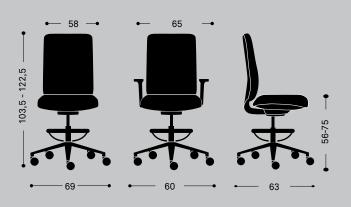
## DRAUGHTSMAN | LOW UPHOLSTERED BACKREST



## DIMENSIONS

<b>103,5 - 122,5</b> cm
<b>56 - 75</b> cm
<b>58 / 65</b> cm
<b>63</b> cm
<b>19,38</b> kg
<b>1,15</b> m

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



#### MESH BACKREST

ELEMENT DESCRIPTION

It is formed by a polyamide frame, which is reinforced by 30% with glass fiber. It has a trapezoidal shape with 570 mm height, 470 mm widht at the base and 430 mm wide at the upper side. The average frame width is 40 mm. The frame supports a technical mesh.

It includes an optional lumbar support, which always provides a correct back support. Asymmetric lumbar adjustment presents rounded vertex and convex curvature.



Mesh backrest with asymmetric lumbar adjustment

### UPHOLSTERED BACKREST

Available in 2 different heights. Rectangular shape with rounded corners. It is formed by a 3 mm thick polypropylene structure, which is covered by 45 mm thick and 65 kg/ cm<sup>3</sup> density upholstered and injected foam. It also has a 4 mm thick polypropylene back shell with a convex ergonomic curve for a better comfort. Lumbar support included, which provides a correct back support. This backrest has a metal reinforce, which is fixed to the mechanism and also serves as a guide for a better lumbar support movement.

# Upholstered backrest

#### SEAT

It is formed by a wooden particle structure, which is injected in a 14 mm thick metal mold and drilled to fix the arms and the mechanism. A polyurethane flexible foam layer is over-injected on the wooden support and is later on upholstered. The foam is 45 mm thick and has a 68 kg/cm<sup>3</sup> density. It is finished with a 3 mm thick polypropylene shell at the inner side.



Seat and Synchro Atom mechanism

#### ARMS







3D adjustable polyamide arm support



aluminium arm support, Black.





4D adjustable arm

Black fixed arm

Polar white fixed arm

1D adjustable arm





The chair may be ordered without arms optionally. They have ergonomic qualities for a better rest of the arms.

Fixed: Fixed: "T" shape polypropylene fixed arms. Black or white.

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. Black or white.

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

### MECHANISM [swivel chairs]

SLIDING SEAT: Optional seat depth adjustment for all swivel chairs.



**SYNCHRO ATOM:** Backrest rotational movement regarding the seat. The turn center is located above the seat surface, near the user's hips, to guarantee an optimum feeling during the leaning movement. 5 blocking positions. Height regulation through a handle for an optimal adjustment.

The mechanism regulates itself automatically regarding the user's weight (for people between 45 and 110 kg).

The backrest is regulated through a handle: it is unlocked by pushing the handle and it gets locked by pulling it.

#### BASE

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

**POLISHED ALUMINIUM OR WHITE ALUMINIUM STAR**: Star base in polished aluminium 69 cm diameter. 5 trapezoidal branches with rounded corners. Finishes in aluminium or polar white.



Polished aluminium

Star base

Star 64 base



Star 69 base



White painted aluminium Star base

## FLOOR SUPPORT

For star 64 base



casters

50 mm double wheel



50 mm soft dout wheel casters

#### For star 69 l base

wheel

casters



65 mm soft double wheel casters



draughtsman

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.



#### 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.



#### 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 selfadjusts to the user's weight



#### **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



- 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.
- G 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 SENTIS PROGRAM



RAW MATERIALS				
Raw Material	Kg	%		
Steel	9,18 Kg	45%		
Plastic	4,69 Kg	23%		
Aluminium	3,26 Kg	16%		
Wood	2,45 Kg	12 %		
Uphols./Fulling	0,816 Kg	4 %		

% Recycled materials= 49% % Recyclable materials= 94%

# Ecodesign

Results reached during the life cycle stages



MATERIALS

**Steel** 15%-99% recycled material.

Aluminium 60% recycled material.

Plastic 30%-40% recycled material. **Staff material** Without HCFC and certified by Okotext.

**Upholsteries** Without COV emissions 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.



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.



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.



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 94%

## CHAIR MAINTENANCE AND CLEANING GUIDE

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

#### FABRICS

- 1 Vacuum often.
- Rub the dirty spot with a wet cloth with PH neutral soap. Test first on a hidden spot.
- 3 Dry foam for carpets can be alternativaly used.

#### PLASTIC PIECES

Rub the dirty spots with a wet cloth with PH neutral soap.

Do not use abrasive products in any case.

#### **METAL PIECES**

Rub the dirty spots with a wet cloth with PH neutral soap.

Polished aluminium pieces can have their polish bak by covering and rubbing them with a dry cottom cloth.

## LEGAL TERMS

#### CERTIFICATES

Forma 5 certifies that the Sentis 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.

Developped by JOSEP LLUSCÀ