



**ZOOTECHNICAL CLIMATE SOLUTIONS** 



# \*AIR INLET



#### our company

Light Progress has been involved since 1987 in the design and production of solutions for air treatment and improvement of environmental conditions.

Applications in the field of zootechnical ventilation have always been one of our main focuses.

CLIMA PROGRESS is the division of Light Progress S.r.l. which deals with products for ventilation in the zootechnical field.

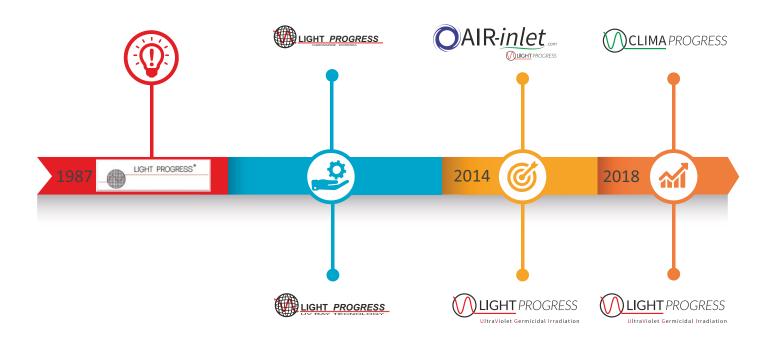
With the new brand CLIMA PROGRESS we have recently re-branded and differentiated our division involved in the design and production of equipment and automation for livestock climatization as well as the calculation and customization of their installation in existing or newly built farms.

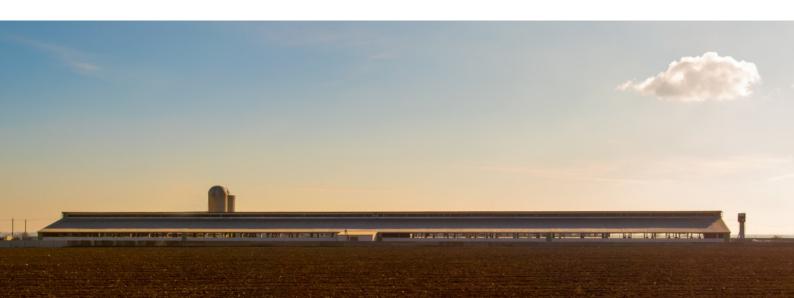
Our experience has been constantly growning in thirty years of applications, and it has been enriched thanks to all the collaborations with technicians and designers of this sector. Our orientation to the client and his needs make us paying attention and care to the design of flexible and customizable solutions.

Our offer of practical systems and the use of high-quality materials take into consideration the applications of our products in particularly difficult environments and where aggressive agents are present, such as farms.

Every single item is entirely built in our headquarters in Italy and undergoes a specific and individual test. This attention distinguishes us and qualifies CLIMA PROGRESS for reliability, efficiency and durability of our products.

Our team is ready to meet customer requests by providing a thorough know-how and an extreme ability to adapt any product to customer needs.





#### AIR INLET models includes these features:

Entirely built in condensation -proof, impact resistant PVC

ABS corner fittings

Wall installation

wall installation

wall installation

Wind/Rain protection

You can choose between mono or multi flap, curved or plain. Flap are made in alveolare PVC and they ar to direct the incoming air flow optimally .

Smooth surface flap to improve the flow of incoming air and minimize dus

You can mount the inlet with contact on the inner or the outer wall

Inlet are available in «standard» size (recess wall=80mm) or custom» size (recess wall 0-60 mm)

Inlets include air seal brushes and gaskets to allow a perfect closure.

All models are supplied with an external bird-proof protective mesh (stainless steel on request).

A wide range of models, accessories optionals allow to complete the installation very easily.

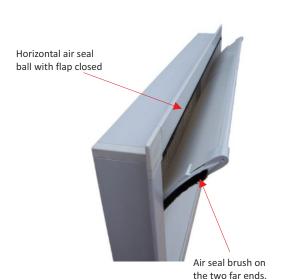
To start choosing the perfect inlet for your application, please follow this schema:

#### cable opening monoflap curved p. 1 insulated cable opening **JET C** curved monoflap cable opening monoflap plain JET P ▶ p. 11 **MULTI JET** multiflap cable opening curved ▶ p. 13 depression opening monoflap **DP JET** curved ▶ p. 15 **MULTI** depression opening multiflap curved ▶ p. 17 **DP JET** Darkner wall installation **DARK JET**

**DARK WALL WAVE** 

**COVER WIND** 









#### **TECHNICAL DATA**

Entirely built in condensation -proof, impact resistant PVC.

ABS corner fittings.

Alveolar PVC «curved» flap for optimum orientation of the incoming air flow

Smooth surface flap to improve the flow of incoming air and minimize dust deposits

Arc-welded and galvanised protective mesh. (stainless steel on request)

One important feature of our air inlets is the option for personalized sizing relative to the housing wall, depending on the thickness of the wall and installation needs.

See our wide range of accessories and optionals for complete installation.

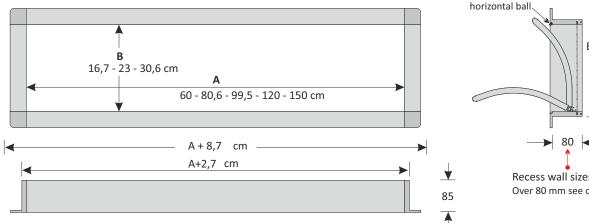
#### Air flow rate in m³/h at negative pressure (Pa) of the various models:

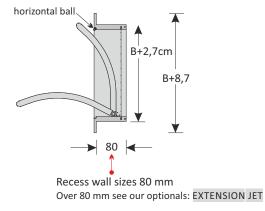
MODELLO	JET 16/60	JET 16/80	JET 16/100	JET 16/120	JET 16/150	JET 23/60	JET 23/80	JET 23/100	JET 23/120	JET 23/150	JET 30/60	JET 30/80	JET 30/100	JET 30/120	JET 30/150
m³∕h a 10Pa	1100	1400	1900	2200	2700	1500	1900	2500	2900	3500	1800	2300	3000	3700	4600
m³/h a 20Pa	1600	2000	2600	3100	3700	2100	2700	3600	4200	5100	2600	3400	4400	5300	6400
m³/h a 40Pa	2100	2700	3200	3800	4600	2700	3600	4100	4600	5800	3600	4200	5600	6500	7700

#### Forza necessaria in Kg.per portare in chiusura il flap delle JET

Kg.   1,5   1,7   1,9   2,2   2,0   2   2,4   2,4   2,0   5   1,9   2,2   2,0   2,9   3,	FORZA Kg	1,5	1,7	1,9	2,2	2,6	2	2,4	2,4	2,6	3	1,9	2,2	2,6	2,9	3,5
--	-------------	-----	-----	-----	-----	-----	---	-----	-----	-----	---	-----	-----	-----	-----	-----

### MODEL WITH STANDARD WALL RECESS SIZES 80mm and only contact ty A





# **HEIGHT B** 60 60

LENGTHA 80,6 99,5 99,5 99,5 120 120 120 150 150 150

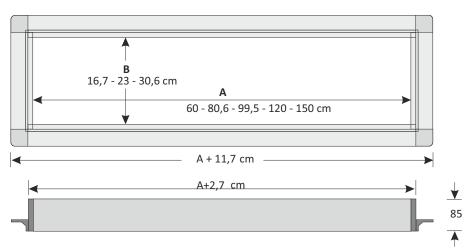
**NB: OTHER SIZES ON REQUEST** 

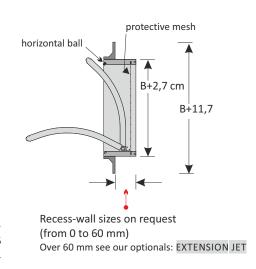
#### **IN ORDER SPECIFY:**

JET sizes B / sizes A / contact A / flap / wall recess 80

**FXAMPLE** JET 16 / 100 / A / O / 80 23

### MODELS WITH WALL RECESS SIZES ON REQUEST and contact ty A Br



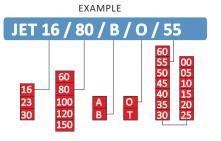


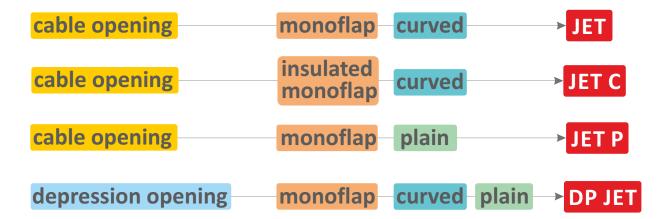
HEIGHT B	16,7	23	30,6
	60	60	60
LEN	80,6	80,6	80,6
LENGTHA	99,5	99,5	99,5
	120	120	120
	150	150	150

NB: OTHER SIZES ON REQUEST

#### IN ORDER SPECIFY:

JET sizes B / sizes A / contact A / flap / wall recess





It is possible to get a suitable configuration for every model of our air inlets, both for cable opening and depression

These are the simple operations to do:

- 1. measure the wall hole
- 2. choose the frame and the in-wall suitable measure
- 3. choose the flap and the in-wall model

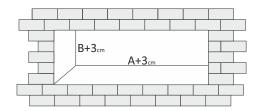
Once chosen the model, you can complete it by adding many different optionals, to get a complete product at the top of its functionality



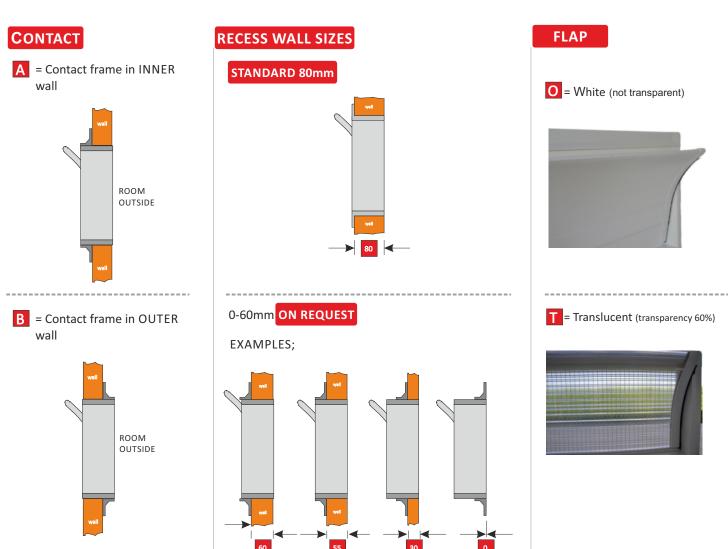




### MISURA FORO-PARETE

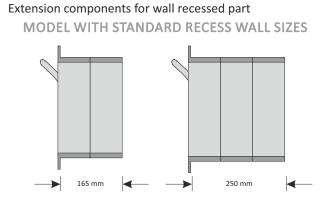


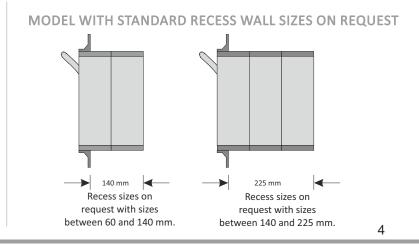
Minimum hole sizes' on the wall



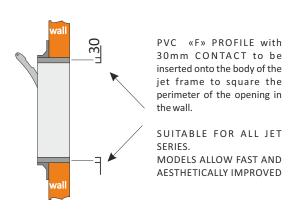
All models are supplied with an external bird-proof protective mesh

#### **EXTENSION JET**





For every JET model, a (FRAME JET) frame is available to square the opening in the wall where the JET is housed. To frame the JET it is important to order JETs with the same thinckness as the wall, in order to positioning the body of the jet on the same side of the wall as the part being squared (the bodyof the JET con be mountend to 4/5 mm inside the wall)



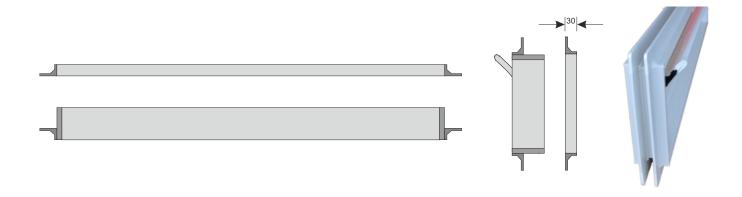




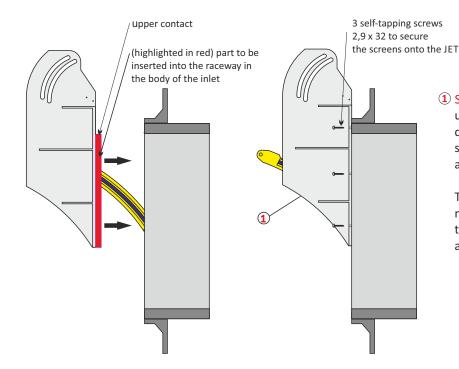


#### FRAME 30 JET

For every JET model, a 30mm thick squaring frame is available to square the hole in the wall where the JET is housed (FRAME 30 JET)



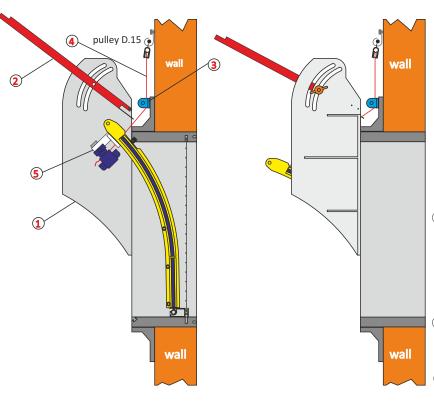
#### **SIDE SCREEN**



1 SIDE SCREEN= Right and left side screens are used to prevent the incoming air flow from deviating to the side. These screens include a space in which you can eventually house an adjustable deflector.

The screens can be easily assembled onto all JET models with 3 self-tapping screws 2.9x32mm, their position is determined by the upper contact and the raceway in the inlet's body (see pict. on

#### **SIDE SCREEN + DEFLECTOR JET**





- ② DEFLECTOR JET=adjustable deflector: Used to direct incoming air in the desired direction it, is particularly useful in ceilings with purlins and/or omegas that may cause the downward deflection of air
- 3 PULLEY R=Return pulley supplied together with the deflector to "guide" the traction cable
- **4** PULLEY 15=Pulley d.15 + polyp. cable+ stainless steel conical spring+clamp
- S BRACKET JET A=Nylon bracket with cable clamp

#### **PULLEY 15**

Pulley 15 item is composed of:

Pulley D.15 = pulley d.15mm (groove base) with eyelet

Cable nylon = 60 cm long polypropylene cable

Clamp plastic D4 = Plastic clamp to secure polypropylene cable to steel cable.

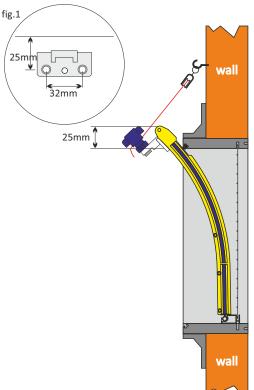
Spring 12 = stainless steel compensation spring with eyelets

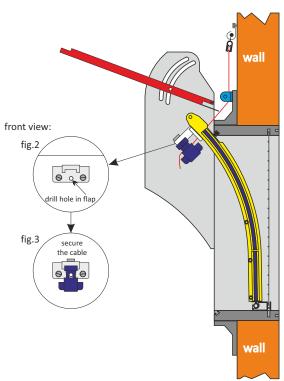
Spring conical = Stainless Steel conical spring



For each JET model with contact (contact frame in inner wall), a nylon bracket with cable is available. You can fix tha bracket on the flap using the 2screws supplied. 2 holes of 4mm (see fig. 1) must be drilled approximately 25 mm from the edge, then connect it to the traction cable to open/close the flap.

In the case of the deflector installation, simply drill the flap at the hole in the nylon bracket (see fig 2) with a 5mm drill bit in order to pass the tow cable through and then fix the cable clamp facing downwards (see fig 3).



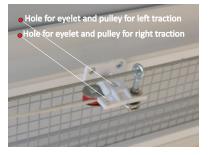






#### BRACKET JET B

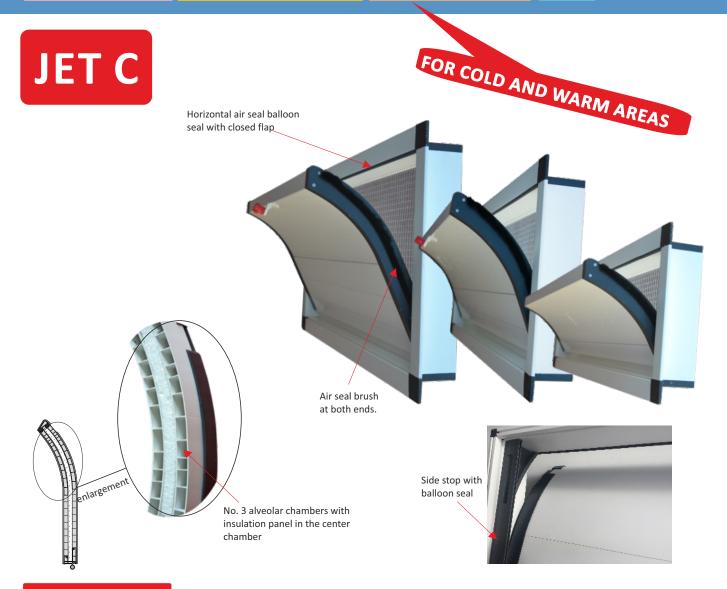
For every model type **B** (contact frame in OUTER wall) a nylon bracket is available. Use the 2 screws to secure it to the edge of the frame, then connect the traction cable to the open/close the flap.



# ACCESSORIES

3	CLAMP PLASTIC D4	Plastic clamp to secure polypropylene cable to steel cable.
THE REAL PROPERTY.	SPRING CONICAL	Conical Stainless Steel compensation spring.
	SPRING 12	Stainless steel spring with compensation eyelets.
4	PULLEY D 10 INOX	Stainless steel pulley with 10mm diameter (groove base) with eyelet and stainless steel screws.
3	PULLEY D 15	Galvanised pulley with 15mm diameter (groove base) with closed eyelet.
dip	PULLEY R	Nylon wall return pulley with 10mm diameter (groove base) with closed eyelet.
	PULLEY D 10 NYLON HOOK	Nylon pulley with 10mm diameter (groove base) with hole for eyelet. Stainless steel hook for sandwich panels or masonry walls for pulley anchoring.
(E)	COUNTERBALANCE 90	Counterweight to be positioned at the end of the line to tension the traction cable.
.0	CABLE IN	Polypropylene cable for connection between the jet flap and the steel cable.
0	CABLE D.4	Galvanized steel cable spiral D.4 mm.
6	PULLEY 60	Pulley with hook to direct the steel cable.
	PULLEY	Double pulley fixed to the shaft of the gear motor to tension the steel cable of the right and left line.
	REDUCTION GEAR	Gear motor combined with limit switch for the steel traction cable.
\	SPRING	20 kg tension spring with eyelets to be positioned at the end of the line to tension the traction cable (as an alternative to the counterbalance 90).
	BRACKET COUNTER BALANCE	Support bracket with pulley for counterbalance
	BRACKET CORNER	Corner bracket with stainless steel pulley with bearing
-	BELK DRUM D.50	Aluminum pulley double strip to tension the right and left cable

For the movement of the jet line, as an alternative to the steel cable, we can supply a stainless steel rod with a 4mm diameter, 3m lenght long, with relative connecting joints between bars.



#### **TECHNICAL DATA**

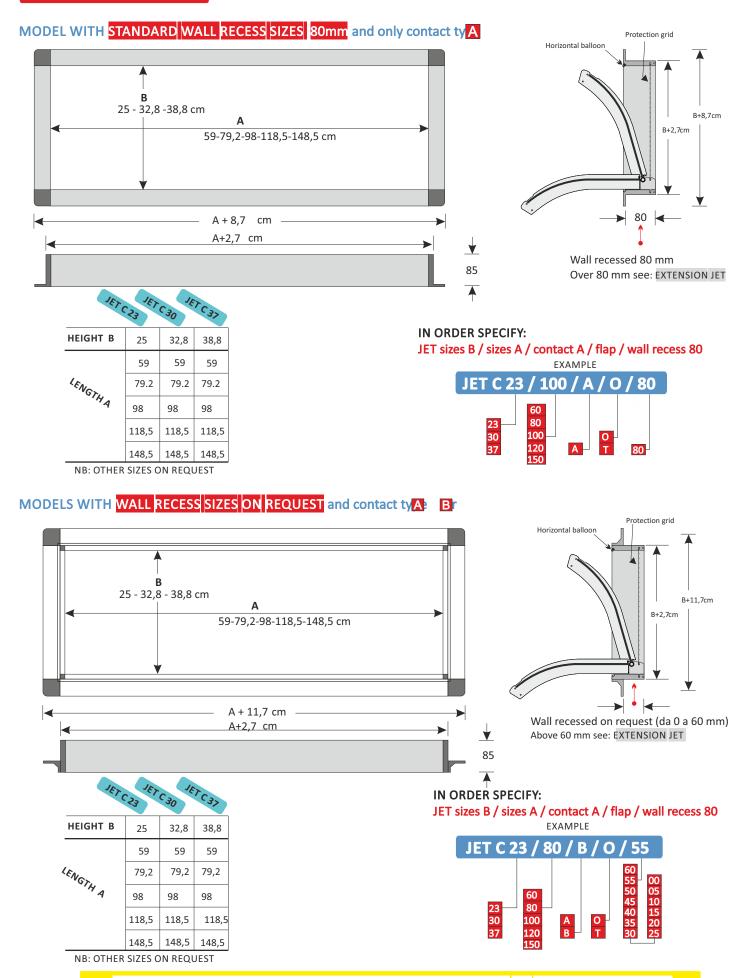
- Curved insulated flap, 33mm thickness with three alveolar chambers. With insulating panel inserted in the central chamber.
- ABS corner fittings.
- Entirely constructed in anti-condensation shockproof PVC.
- Smooth flap surface for better air flow and less dust deposit.
- Electro-welded and galvanised protection mesh. (Stainless steel on request).
- An important feature of our air inlets is the possibility to be positioned, with respect to the housing wall, in a customised manner according to the thickness of the wall and the requirements of the installation.
- Wide range of accessories and options for a complete installation.

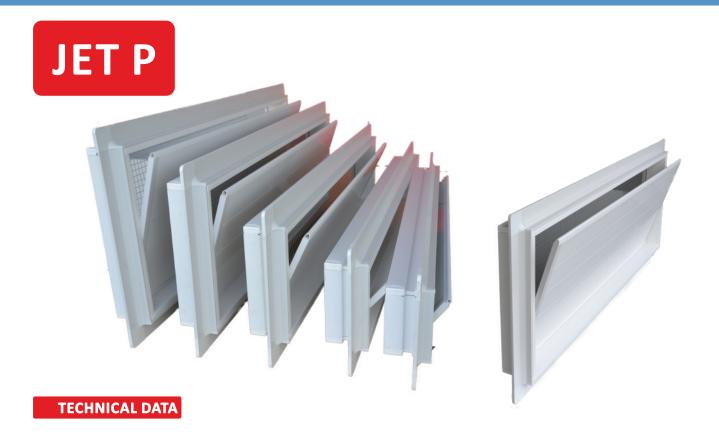
#### Air flow rate m<sup>3</sup>/h at the negative pressure for the various models:

MODELS	JET C 23/60	JET C 23/80	JET C 23/100	JET C 23/120	JET C 23/150	JET C 30/60	JET C 30/80	JET C 30/100	JET C 30/120	JET C 30/150	JET C 37/60	JET C 37/80	JET C 37/100	JET C 37/120	JET C 37/150
m³∕h a 10Pa	1500	1900	2500	2900	3500	1800	2300	3000	3700	4600	2200	2800	3600	4400	5200
m³/h a 20Pa	2100	2700	3600	4200	5100	2600	3400	4400	5300	6400	3800	4600	5200	5700	6500
m³/h a 40Pa	2700	3600	4100	4600	5800	3600	4200	5600	6500	7700	4600	5600	7000	8000	9200

#### Strength required in Kg. to close the JET flap

FORZA Kg. 2,2 2,4 2,6 2,8 3,2 2,3 2,5 2,6 2,8 3,4 2,4 2,7	2,8		3,2	3,8
---	-----	--	-----	-----





Entirely built in condensation-proof impact-resistant PVC.

ABS corner fittings.

Alveolar PVC "curved" flap for optimum orientation of the flow of the incoming air flow.

Air seal brush horizontally and on both sides of the flap.

Smooth surface flap to improve the flow of incoming air and minimize dust deposits.

Arc-welded and galvanised protective mesh. (stainless steel on request)

One important feature of our air inlets is the option of personalized sizing relative to the housing wall, depending on the thickness of the wall and installation needs.

See our wide range of accessories and optionals for complete installation.

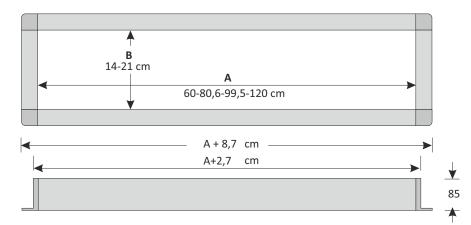
Air flow in m³/h at negative pressure 20 Pa of the various models:

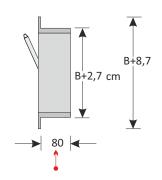
MODEL	JET P 14/60		JET P 14/100	JET P 14/120			JET P 21/100	JET P 21/120
m³/h	1400	1700	1900	2100	2600	3000	3500	3900

Force required in Kg. to close the JET flap

FORCE Kg.	1,0	1,2	1,3	1,5	1,2	1,3	1,5	1,7
--------------	-----	-----	-----	-----	-----	-----	-----	-----

#### MODEL WITH STANDARD WALL RECESS SIZES 80mm and only contact ty A





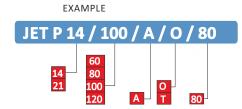
Recess wall sizes 80 mm Over 80 mm see our optionals: EXTENSION JET

JET	PIA	P21
HEIGHT B	14	21
	60	60
LENGTHA	80,6	80,6
14	99,5	99,5
	120	120

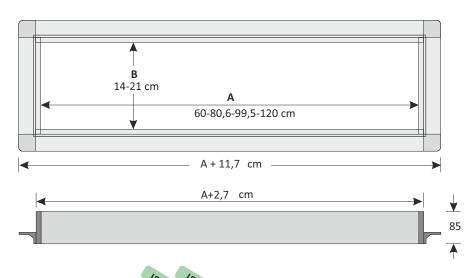
NB: OTHER SIZES ON REQUEST

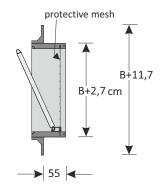
#### IN ORDER SPECIFY:

JET sizes B / sizes A / contact A / flap / wall recess 80

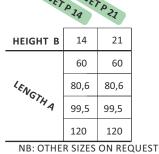


# MODELS WITH WALL RECESS SIZES ON REQUEST and contact ty A Br



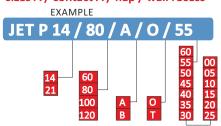


Recess wall sizes 55mm other mesurements on request (from 0 to 60 mm) Over 60 mm see our optionals: EXTENSION JET



#### **IN ORDER SPECIFY:**

JET sizes B / sizes A / contact A / flap / wall recess



# **MULTI JET**



#### TECHNICAL DATA

Entirely built in condensation-proof impact-resistant PVC.

ABS corner fittings.

 $Alveolar\,PVC\,«curved»\,flap\,for\,optimum\,orientation\,of\,the\,incoming\,air\,flow.$ 

Air seal baloon gasket on the upper side of each flap.

On both flap sides, beside the air seal brushes, lateral side seal gasket allow an hermetic closure.

Smooth surface flap to improve the flow of incoming air and minimise dust deposits.

A stainless steel clamp on both flap sides allow to adjust the closure of all flaps at the same time, tightening the linkin stainless steel rod.

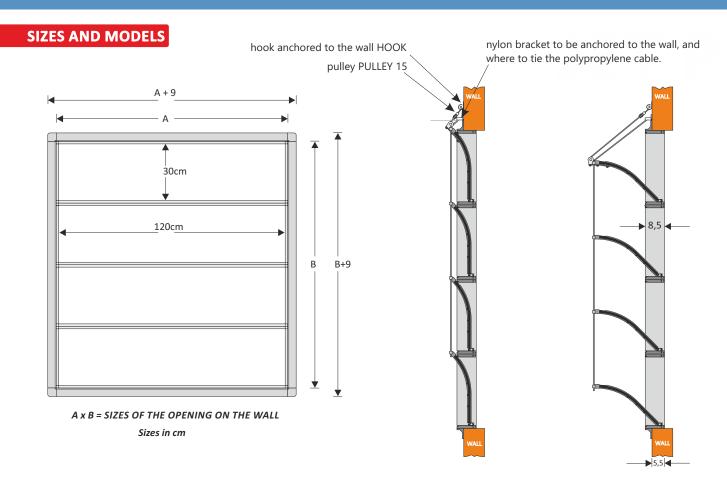
Sides' outer frame with 4,5 cm bar.

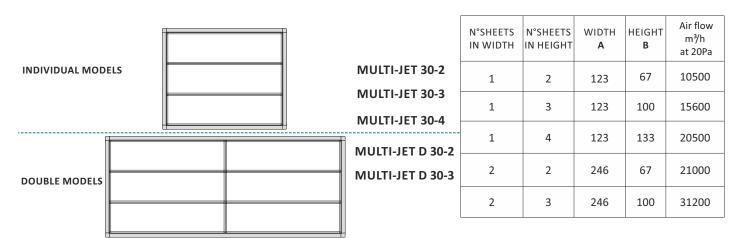
Room interior view

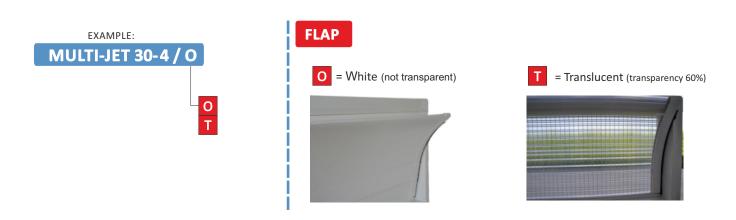


Room exterior view



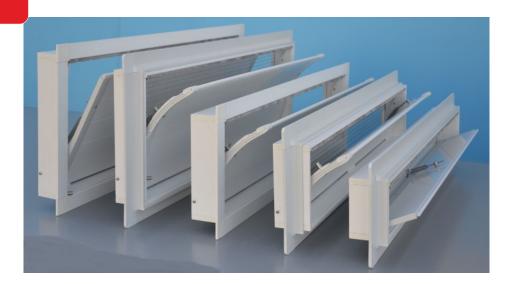






wall installation

# **DP JET**



#### TECHNICAL DATA

Completely independent, doesn't need any type of automation (reduction motors, cables, control unit with vacuum gauge) Entirely built in condensation-proof impact-resistant PVC.

ABS corner fittings.

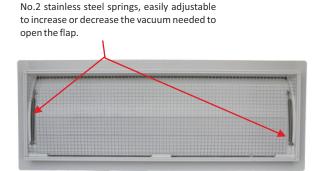
Alveolar PVC «curved» flap for best orientation of the incoming air flow. (Plain flap for DP JET 11 e 35)

Smooth surface flap to improve the flow of incoming air and minimise dust deposits.

Electro galvanised protection mesh.(Stainless steel on request).

One important feature of our air inlets is the option for personalized sizing relative to the housing wall, depending on the thickness of the wall and installation needs.

See our wide range of accessories and optionals for complete installation (pag 6).





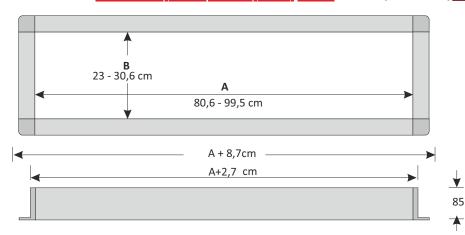


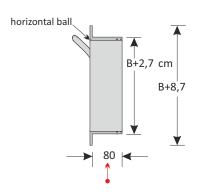
Air flow rate m³/h at the negative pressure for the various models:

MODEL	DP JET 23/80	DP JET 23/100	DP JET 30/80	DP JET 30/100
20Pa AIR FLOW RATE m³/h	1900	2200	2500	3200
40Pa AIR FLOW RATE m³/h	2700	3000	3200	4000
Opening span	(cm) (flap	complete	ely open):	
	1650	2180	2170	2870

### MODEL WITH STANDARD WALL RECESS SIZES 80mm and only contact ty A

wall installation





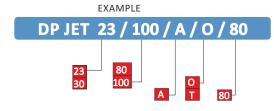
Recess wall sizes 80 mm Over 80 mm see our optionals: EXTENSION JET



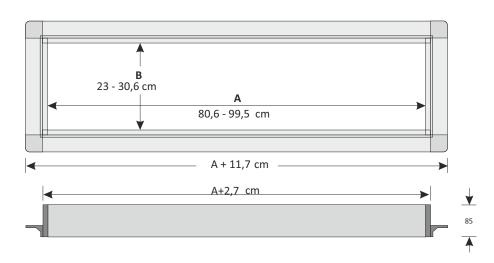
HEIGHT B	23	30,6
LENG	80,6	80,6
LENGTHA	99,5	99,5

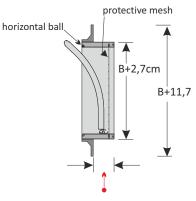
#### **IN ORDER SPECIFY:**

JET sizes B / sizes A / contact A / flap / wall recess 80



### MODELS WITH WALL RECESS SIZES ON REQUEST and contact ty A Br





Recess wall sizes on request (from 0 to 60 mm) Over 60 mm see our optionals: EXTENSION JET

#### **IN ORDER SPECIFY:** JET sizes B / sizes A / contact A / flap / wall recess



EXAMPLE DP JET 23 / 80 / A / O / 55

# **MULTI DP JET**



#### **TECHNICAL DATA**

Completely independent, does not require any type of automation (gear motors, cables, control unit with depression thermostat. Entirely built in condensation-proof impact-resistant PVC.

ABS corner fittings.

Alveolar PVC "curved" flap for optimum direction of the flow of incoming air.

Air seal brush at the two side ends.

Smooth surface flap to improve the flow of incoming air and minimise dust deposits.

Sides' frame with 4.5 cm bar

In each MULTI DP JET 23 model..., in the 2 or 3 flaps version, it is possible to adjust the counterweight of each flap in a different manner from each other.

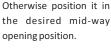
This allows each flaps opening to be different from the other, accordingly to the vacuum created inside the room.

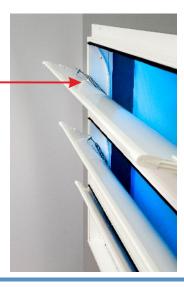
Usually, the flap that is positioned higher is adjusted more "lightly" compared to the counterbalance of the lower flap, so it starts to open up with a lesser depression than required to opening the flap located lower (see photo 2).

This makes the use of this type of air inlet possible not only in the winter seasons, but also in the autumn/spring seasons, when a greater volume of incoming air is required.

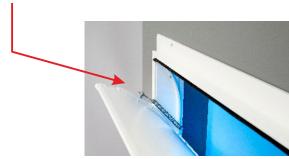
In fact, in mid seasons, the higher temperature compared to the winter one, let fans turn faster, increasing the pressure inside the room and consequently also the opening of the lower flaps (see photo 1).

Lock on the sliding guide suitable to block the flap in closing position. Otherwise position it in

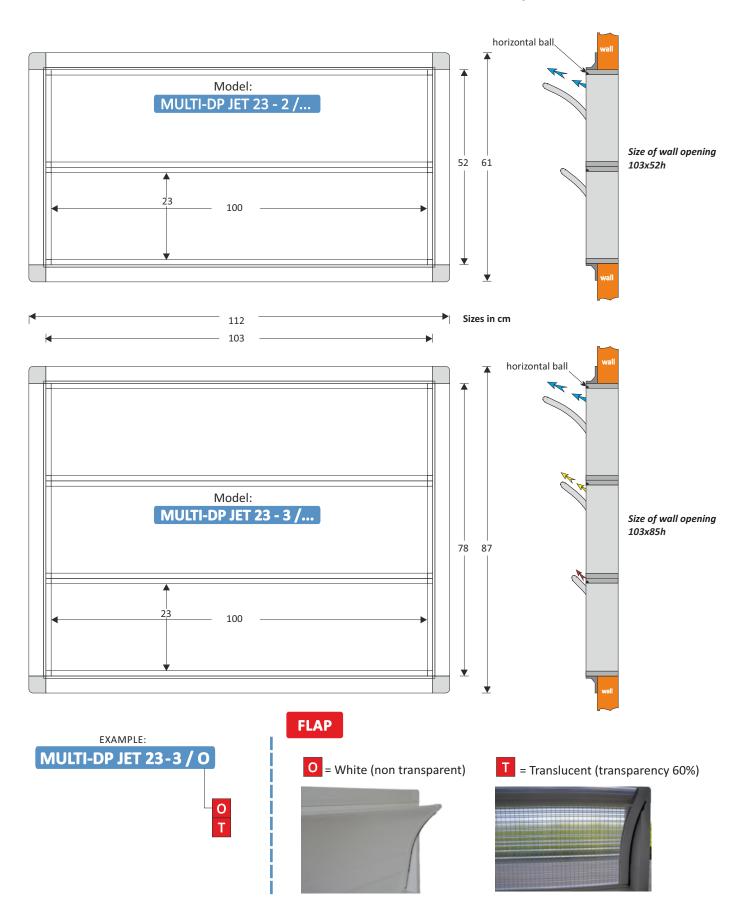




Each flap has an easily adjustable counterweight which allows the increasing or decreasing of the negative pressure required for flap opening, simply by screwing or tightening the two nylon wing nuts.



MULTI-DP JET 25 is avaiable in 2 models, both can be choosen with white or translucent flap:



# DARK JET



#### **TECHNICAL DATA**

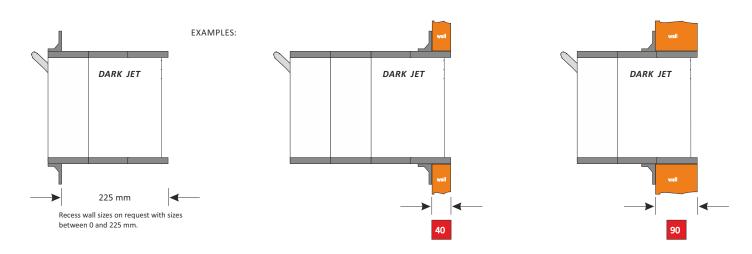
For each JET model, DARK JET darkener is available to let the air passing by, blocking the light. DARK JET is a P.P. cellular panel, inserted in 2 inlet extension. It fits perfectly onto the air inlet body.

DARK JET are inserted into dedicated slots. This means they can be easily and quickly extracted when periodic cleaning are necessary.

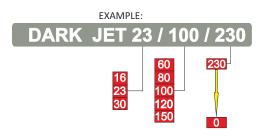
Dark Jet are supplied directly on the AIR INLET model choosen.

#### **WALL RECESS SIZES ON REQUEST**

It is possible to request a personalised recessed wall structure, thus avoiding the protrusion of the DARK JET towards the outside and allowing the eventual installation of wind shields or saver windows.



	716	<sup>(7</sup> /3 <sup>3</sup> (	<sup>3</sup> 730
HEIGHT B	16,7	23	30,5
	60	60	60
LENGTH A	80,6	80,6	80,6
'** A	99,5	99,5	99,5
	120	120	120
	150	150	150



# **DARK WALL WAVE**

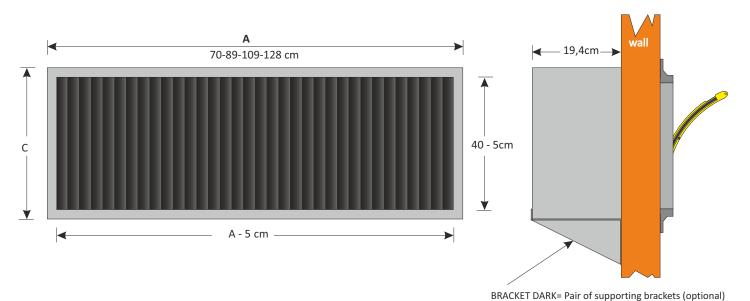




#### **TECHNICAL DATA**

- Double wave darkening slats in P.P. guarantee total darkening even in the presence of direct sunlight. They are vertically installed into a pre-coated metal box fitted with slots in which slats are inserted.
- Vertical darkening slats minimise dust deposits and can be easily and quickly extracted whenever necessary.

#### **SIZES AND MODELS**



HEIGHT	40	
	WIDTH A	
DARK W.WAVE/60	70	
DARK W.WAVE/80	89	
DARK W.WAVE/100	109	
DARK W.WAVE/120	128	

DARK WALL WAVE 30 / 100



# **COVER WIND**



The COVER WIND is positioned on the outside wall of the room, above the opening housing the air inlet (our products: JET... DP JET...).

It is particulary effective, protecting aganist wind and rain, which in the absence of these covers would enter directly into the room.



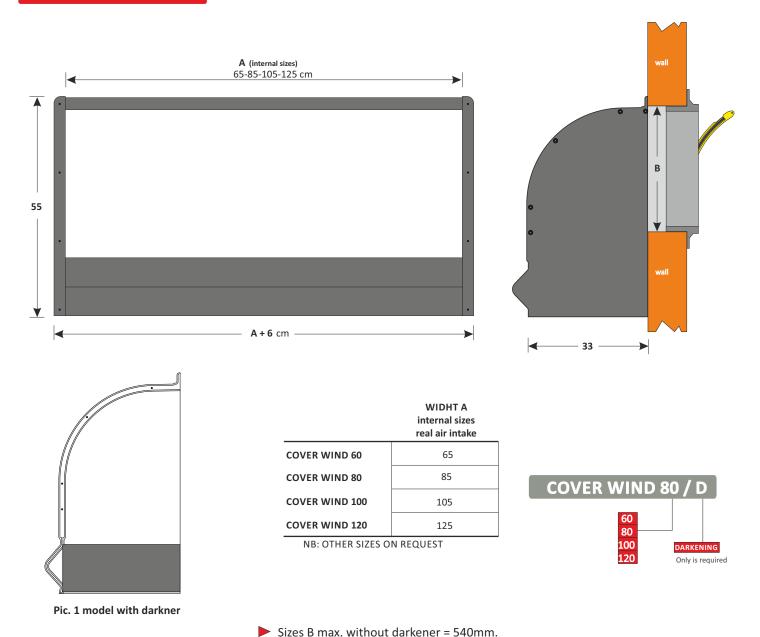
As an optional, in case it is necessary to avoid the light to get into the environment, we can supply the assembled honeycomb darkener pack, which is cut on size basing on chosen COVER WIND model. (Model version DT). The dark is obtained by inserting the darkener pack from below into the seats on the 2 heads. This assembled darkener pack allows to significantly reduce the mounting time in the worksite (see the picture on the side).



#### **TECHNICAL DATA**

- Double wall PVC frame to ensure the improved stability of the COVER WIND body and at the same time higher protection against heat and cold compared to similar single wall models.
- n. 2 nylon end caps with housing in case of need of inserting the darkener pack.
- The blackout package can also be installed in a later phase, using COVER WIND wall brackets.
- **©** 3cm contact frames on the sides and in the upper horizontal section wall installation.

#### **SIZES AND MODELS**



To facilitate trasportation, COVER WIND are supplied with two separated sides. These need to be screwed onto the PVC frame using the 8 screws supplied.

Sizes B max. with darkener = 400mm.



•



Divisione Zootechnical Climate Solutions/ Produzione 2 Loc. San Antonino, 40 52043 Castiglion F.no (AR) ITALY

T. +39.0575.657423 F. +39.0575.657502

www.climaprogress.it - info@climaprogress.it

CLIMA PROGRESS is a brand of



Legal Office /Headquarter / UV division Loc. San Lorenzo, 40 52031 Anghiari (AR) ITALY info@lightprogress.it IT01208950517