

TECAI®

multibot



THE FUTURE OF AIR DUCT CLEANING IS NOW

One robot for multiple tasks

This multitask robot will allow you to carry out multiple applications, coupling different modules for cleaning, disinfection and coating inside the air ducts. It incorporates the latest technologies such as FullHD cameras, automatic module elevation system, HMI touch screen control panel, and HD recording system



multibot



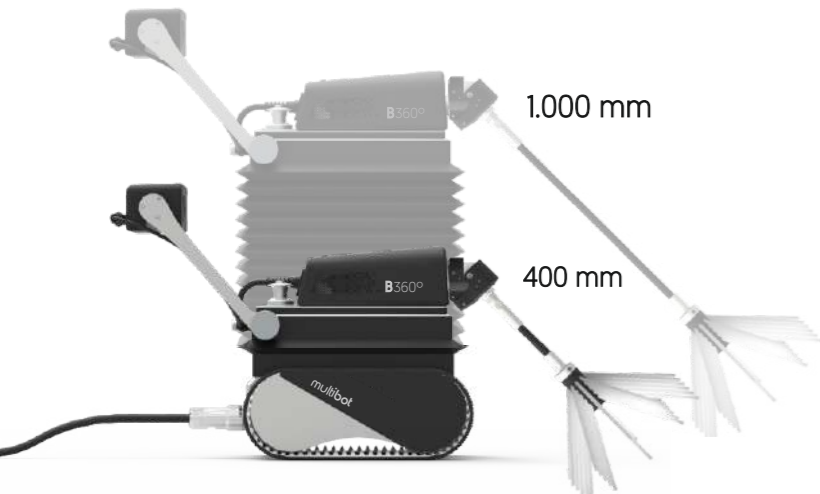
Modular design

Multibot makes use of robotised platforms where different modules can be connected, making it suitable for any air duct cleaning task, as well as modules with different cleaning, disinfection and coating settings.



It reaches the top

Thanks to the automated elevation system offered by the robotised **Max** platform, it is possible to clean large air ducts of up to 1000mm. The height regulation adapts itself from the control unit as the robot moves.



Versatile

The Multibot's powerful traction crawler allows you to move over any surface and climb slopes of 30° inclination. The robot and the application modules are designed to clean any size of circular or square duct and for any size.



Robust and reliable

Built with the most resistant materials, such as stainless steel in the structure and the dense polyamide in the casing. The heart of Multibot are its powerful engines of last generation, which assures us a long duration and reliability.



Nicely-sharp images

The last technology in visualization and recording of the images collected by Multibot in Full HD 1080P. It has a high resolution monitor for recording and storage of videos and photographs, with a touch screen resistant to dust and water.



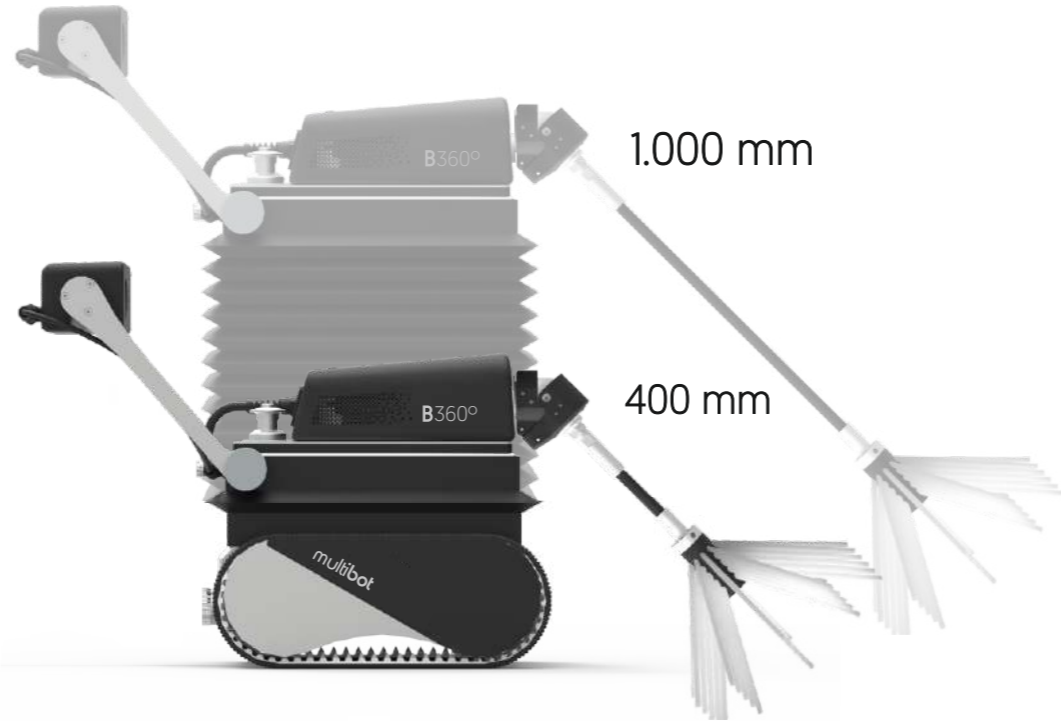
Reach the furthest

With the robotised MAX platform, it is possible to clean, disinfect and coat air ducts between 400 mm and 1000 mm. This is because, thanks to the modules' automated elevation system, the height regulation adapts itself to the air ducts size from the control unit as the robot moves.

MAX ROBOT



Arm for height and angle adjustment of the display module



1.000 mm

400 mm

Platform for coupling the application modules

Traction system by caterpillar wheels

Front-lighting spotlights

TECHNICAL CHARACTERISTICS

Dimensions and weight (excluding modules)	L x W x H : 320 x 200 x 250 mm / 11 kg L x W x H : 12.6 x 7.8 x 9.8 inch / 24.2 lb
Structural material	Stainless steel and polyamide (PA12)
Cameras (front and back)	Full Colour HD 1080P
Lighting	High intensity LED 4000 K 360°



360° adaptive brushing application module

Communication Connection of the application module

Rear view camera

Communication Connection with the control unit

MICRO ROBOT

Compact design

With the robotised MICRO platform, it is possible to clean, disinfect and coat the smallest air ducts between 250 mm and 500 mm, small outside and large inside. It integrates all the same advanced technology as its big brother, the MAX robot, in order to carry out any task using the Multibot system's available modules.

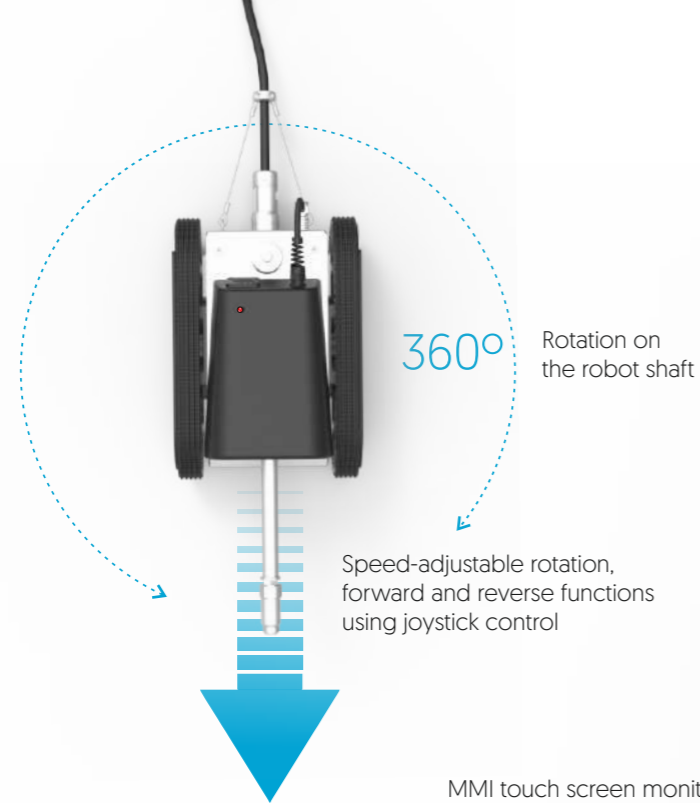


TECHNICAL CHARACTERISTICS

Dimensions and weight without module	L x W x H: 283 x 198 x 112 mm / 5,5 kg L x W x H : 11 x 7.8 x 4.4 inch / 12.1 lb
Structural material	Stainless steel and polyamide (PA12)
Cameras (front and back)	Color Full HD 1080P
Lighting (front and back)	High intensity LED 4000 K 360°



CONTROL UNIT



360°

Rotation on the robot shaft

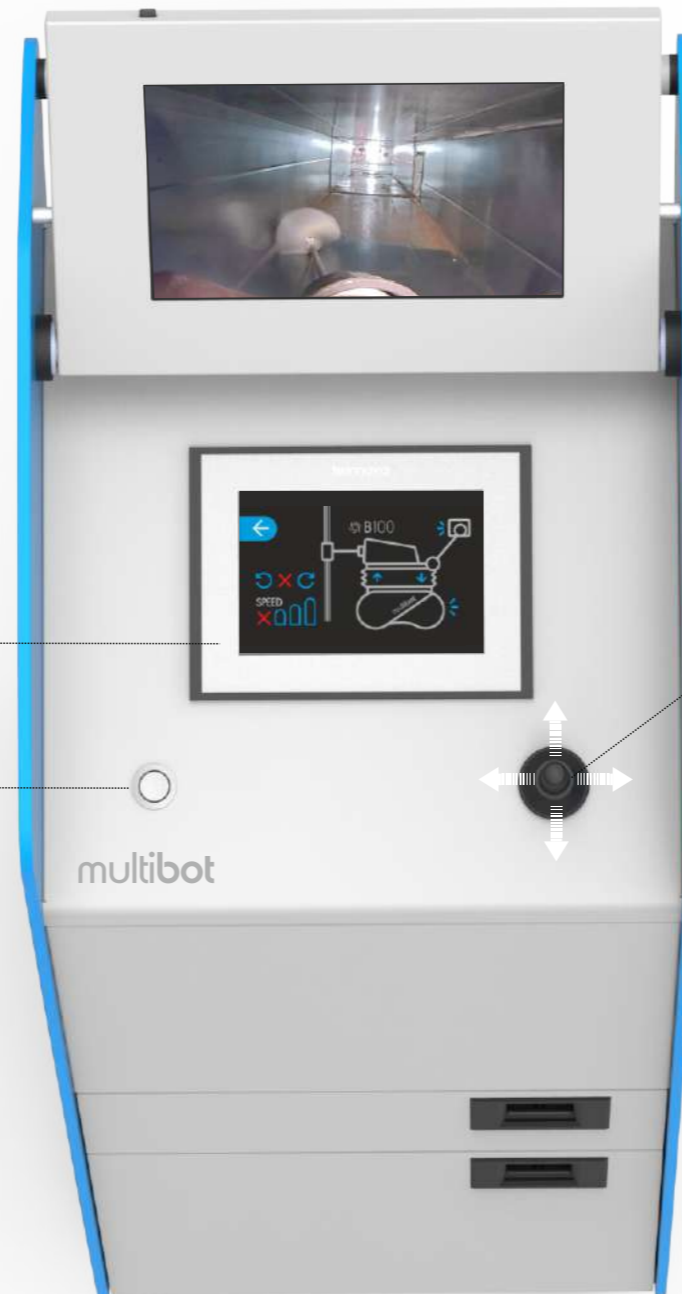
Speed-adjustable rotation, forward and reverse functions using joystick control

MMI touch screen monitor for control all robot functions and application modules

Activation switch of the control unit



Touch screen display and HD video recording



Removable box for storage the application modules

Removable box to store the robotised platform

Joystick for control the direction and speed of the tractor unit

Reel for storing 20 m of cable from the communication cable between robot and control panel



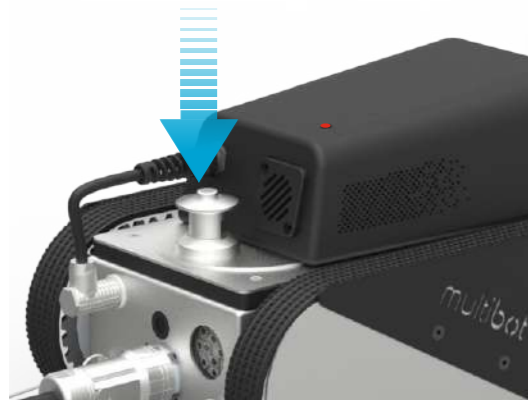
TECHNICAL CHARACTERISTICS

Display monitor	10" 2048 x 1546 screen, Intel X7, 8GB RAM
Control screen	7" 800 x 480 px HDMI - Touch control
Structural material	Oven-painted steel and HDPE
Power supply	230V - 50 Hz // 110V - 60 Hz
Empty weight and dimensions	L x W x H : 486 x 416 x 1070 mm / 53 kg L x W x H : 19 x 16.3 x 42 inch / 116.8 lb

APPS MODULES

Quick Connect

Easy and fast connection between the robot's modules without the need for tools, fast connection between cable and plug.



The Multibot's modular concept is made up of different modules which carry out different tasks inside air ducts, and all are compatible with the MAX and MICRO robotised platforms, with fast and easy connection.



Hose protector

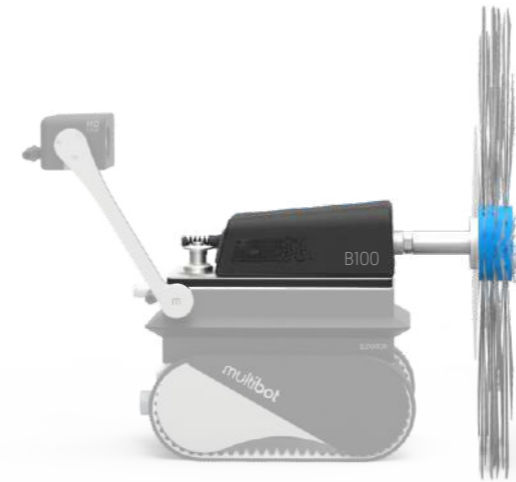
Protect the robot hose when accessing the duct [Accessory included].

CLEANING MODULES



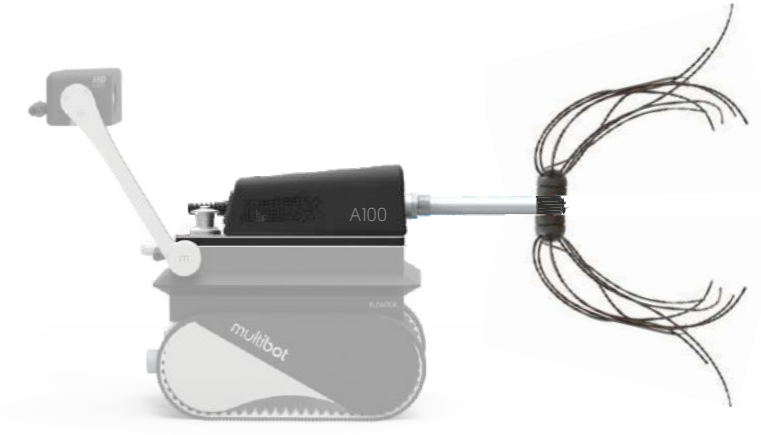
B360° 

▶ 360° ADAPTIVE BRUSH MODULE



B100 

▶ FIXED BRUSH MODULE



A100 

▶ AIR INJECTION MODULE

COATING MODULE



S360° 

▶ 360° COATING MODULE

DISINFECTION MODULE



D360° 

▶ 360° DISINFECTION MODULE



MICRO

▶ ROBOTISED PLATFORM

CLEANING MODULE

B360°



360° ADAPTATIVE BRUSH MODULE

App. rotary brush with perimetral movement duct cleaning application module. It moves through the duct adapting to its shape and size. It is very effective for square ducts for deep cleaning of the corners

TECHNICAL CHARACTERISTICS

DIMENSIONS AND WEIGHT [L x W x H]: 280 x 140 x 75 mm - 3 kg // 11 x 5.5 x 2.95 inch - 6.6 lb
BRUSHING MACHINE: 75 W output, 555 rpm speed
The PERIMETRAL MOVEMENT features a two-way rotation and 3 speeds (4, 8 and 12 rpm).

USE IN AIR DUCTS:
Shape: Rectangular, square and circular / Material: Metal / Dimensions: from 400 to 1000 mm

INCLUDED ACCESSORIES

BRUSH EXTENSION RODS

For adjustable perimetral brush made of coated fibreglass and a nylon brush (0,5 mm)
Fast connection to module B360°



LONG EXTENSION - 800 mm
for air ducts between
700 mm and 1000 mm

SHORT EXTENSION - 500 mm
for air ducts between
400 mm and 700 mm

B360° Code AC3120609.



SPEED REGULATION
OF PERIMETRAL ROTATION



DOUBLE DIRECTION
OF ROTATION



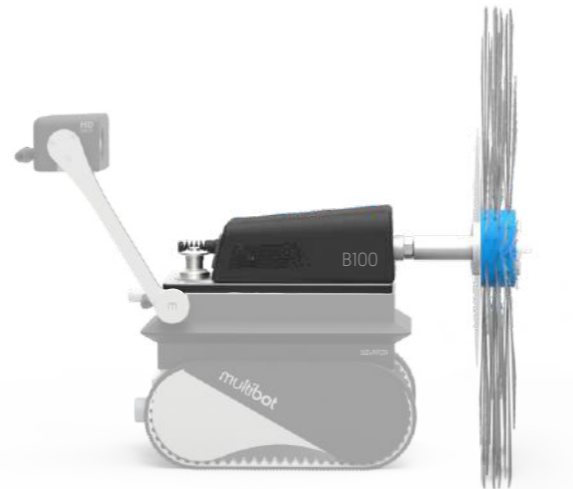
PERIMETRAL
ROTATION

EFFECTIVE
CORNER CLEANING



BRUSH CLEANING MODULE

B100



ROTATING BRUSH CLEANING MODULE

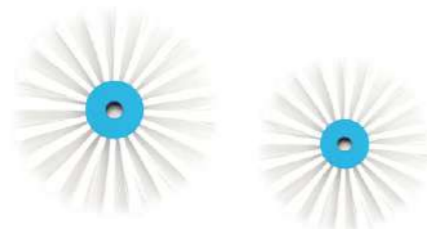
App. rotary brush duct cleaning application module. Total control of the speed and direction and rotation direction of the brush. The best option for the cleaning of circular ducts.

TECHNICAL CHARACTERISTICS

DIMENSIONS AND WEIGHT [L x W x H]: 270 x 140 x 75 mm - 2 kg // 10.6 x 5.5 x 2.95 inch - 4.4 lb
BRUSHING MACHINE: 85 W output, 400 rpm speed

USE IN AIR DUCTS:
Shape: Circular / Material: Metal / Dimensions: from 400 to 1.000 mm

OPTIONAL ACCESSORIES



PACK 5 BRUSHES
Nylon brushes for circular duct
Measurements: Ø350, 400, 500, 600 y 700 mm.
COD. CP2201016

B100 Code AC3120608.



SPEED REGULATION
OF BRUSH ROTATION



DOUBLE DIRECTION
OF ROTATION



FASTEST CLEANING IN
CIRCULAR AIR DUCTS



CLEANING MODULE

A100



AIR INJECTION MODULE

App. Silicon whips air injection duct cleaning application module. The whips spin all over sweeping the dust forward. This cleaning system is ideal for air ducts with coating made of fibre and other soft materials.

TECHNICAL CHARACTERISTICS

DIMENSIONS AND WEIGHT [L x W x H]: 270 x 140 x 75 mm - 3 kg // 10.6 x 5.5 x 2.95 inch - 6.6 lb
 COMPRESSED AIR REQUIREMENTS: Minimum air flow 220 l/min at 6/8 bar
 The ROTATIVE MOVEMENT features a two-way rotation and 3 speeds [4, 8 and 12 rpm].

USE IN AIR DUCTS:
 Shape: Rectangular, square and circular / Material: Metal and fibre / Measures: from 250 to 1.000 mm

ACCESSORIES INCLUDED



20 m hose
for pressurised air.



300 mm, 400 mm
and 500 mm
silicone tubes.

OPTIONAL ACCESSORIES



AIR COMPRESSOR AR16
 Air compressor.
 Maximum working pressure:
 10 bar - 145 psi
 Air inlet: 400 l/min - 7.06 cfm

A100 Code AC3120627.

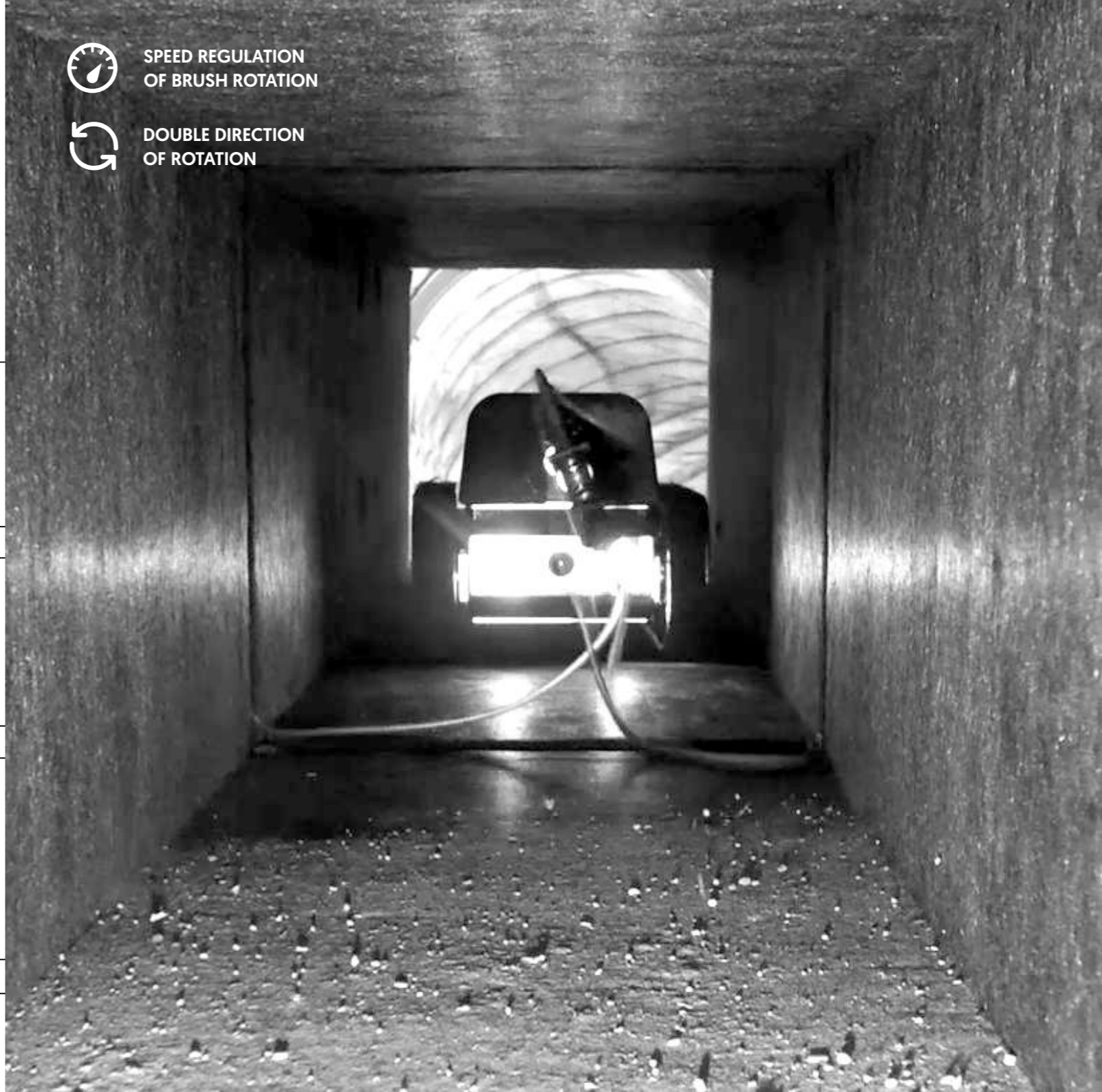
Ar16 Code CO3330206



SPEED REGULATION
OF BRUSH ROTATION



DOUBLE DIRECTION
OF ROTATION



DISINFECTION MODULE

D360°



360° DISINFECTION MODULE

App. for disinfecting air duct interiors using an injection pump and perimetral nebulisation nozzle at 360°. This system applies disinfectants evenly and quickly.

TECHNICAL CHARACTERISTICS

DIMENSIONS AND WEIGHT [L x W x H]: 270 x 140 x 75 mm - 3 kg // 10.6 x 5.5 x 2.95 inch - 6.6 lb
 BOX DIMENSIONS AND WEIGHT: [L x W x H]: 600 x 400 x 270 mm - 12 kg // 23.6 x 15.7 x 10.6 inch - 26.5 lb
 INJECTION PUMP: Flow 5.4 l/min Pressure 7 bar
 INJECTION NOZZLE: Opening angle 160°. Droplet size 20 microns.

USE IN AIR DUCTS:
 Shape: Rectangular, square and circular / Material: Metal and fibre / Measures: from 250 to 1.000 mm

ACCESSORIES INCLUDED

INJECTION SYSTEM BOX
 Integrates the pump for nebulising chemical products. Compartment for module transportation. 20 m hose.



CONSUMABLES



DISINFECTING PRODUCT AK-GERMA 100
 Concentrated liquid [anti-viral, anti-bacterial and anti-fungal] for disinfecting surfaces through nebulisation.

D360° Code AC3120628.

Code PQ8400113.



TOTAL AREA OF AIR DUCT TO DISINFECT



ULTRAFINE 20 MICRON PARTICLES



SEALING MODULE



S360°

360° COATING MODULE

App. Module application for coating the interior of ducts with a double injection nozzle and a 360° perimeter movement. This system applies the sealer homogeneously and quickly.

TECHNICAL CHARACTERISTICS

DIMENSIONS AND WEIGHT [L x W x H]: 270 x 140 x 75 mm - 3 kg // 10.6 x 5.5 x 2.95 inch - 6.6 lb

HIGH PRESSURE PUMP REQUIREMENTS: Minimum flow 15 l/min at 220 bar

The ROTATIVE MOVEMENT features a two-way rotation and 3 speeds [4, 8 and 12 rpm].

USE IN AIR DUCTS:

Shape: Rectangular, square and circular / Material: Metal and fibre / Measures: from 250 to 1.000 mm

INCLUDED ACCESSORIES



20 m hose
for pressurised air.

S360° Code AC3120626

OPTIONAL ACCESSORIES



AIRLESS PUMP

High pressure pumping system of
220 bar and flow of 15 l/min



ELASBIO. chemical sealant.
19 litre cylinder

Code PQ8400110.

Code AC3120605



TOTAL COAT
AREA



DOUBLE DIRECTION
OF ROTATION



SPEED REGULATION
OF BRUSH ROTATION



TEINNOVA®

