



CIRCULAR CONTROL DAMPERS

WR5 SERIES

OVERVIEW AND TECHNICAL DATA

OVERVIEW :

WR control dampers are a new series of products used for control on circular ducts. This series is available with models WR5 WR6 WR7 WR8 for application on all HVAC plants with manual, pneumatic or electric control. The installation of these components permits the control of the air flow rate variation (VAV) or the pressure variation control on several kinds of plants. Specifically:

- a) HVAC plants regulation
- b) modulated calibration
- c) modulated or total closing

Circular control dampers have a different construction according to different installation. Indeed they can be mounted by coupling (figure n° 1) and by flanges (figure n° 2).

Figure no. 1 **WR5 WR6** Circular control dampers for coupling installation

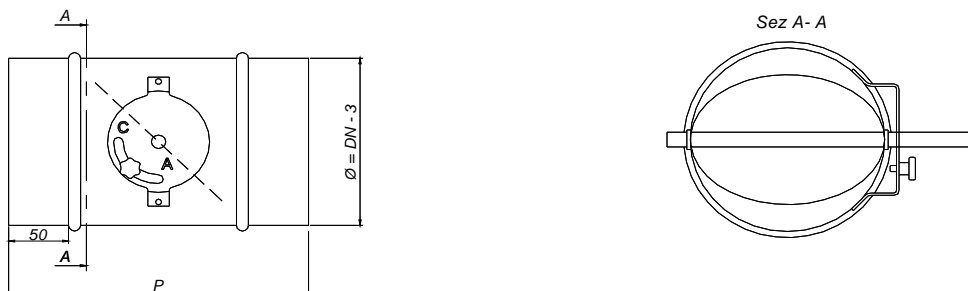
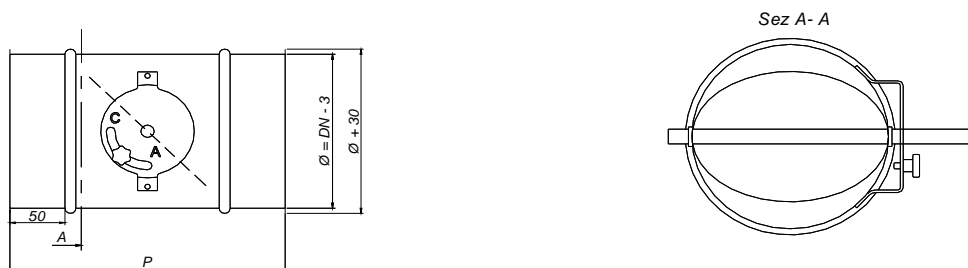


Figure no. 2 **WR7 WR8** Circular control dampers for installation with flanges



WR5	P=200mm
WR6	P=300mm
WR7	P=300mm
WR8	P=400mm



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TECNICAL DATA INSTALLATION PROCEDURE

CHARACTERISTICS :

Damper: Mobile closing system mounted into an air duct, designed to control and close air flow.

Circular frame, material and construction: Manufactured from galvanized sheet steel with stiffening ribs, complete of two couplings at the ends of the control damper.

Circular frame with rims, material and construction: Manufactured from galvanized sheet steel with stiffening ribs, complete of two rims at the ends of the control damper for installation by collars.

Circular frame with flanges, material and construction: Manufactured from galvanized sheet steel with stiffening ribs, complete of two flanges at the ends of the control damper for installation by flanges.

Blade, material and construction: Manufactured from galvanized sheet steel and designed.

Control mechanism, material and construction: Control by central axle directly fixed on the blade by manual or pneumatic or electric control system.

Fixing, duct without flanges: Installation by rivets or self-threading screws between duct and damper ends.

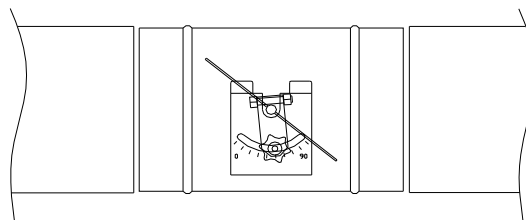
Fixing, duct with flange: Installation by clamping of flanges with bolts and nuts between flanges on duct and damper.

Operative Temperature: From minimum - 0° to maximum + 150° C.

INSTALLATION PROCEDURE:

Inner installation of coupling damper (figure no.3)

Figure no.3 Coupling damper





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AIR FLOW RATE - PRESSURE DROP
BLADE REGULATION - DAMPER SECTION

SELECTION EXAMPLE : a) Air flow = 2000 m³/h b) Pressure drop $\Delta p = 100$ Pa
c) Blade deflection angle $\alpha = 27^\circ$ d) Damper diameter = 250 mm

WR5 Figure no. 4

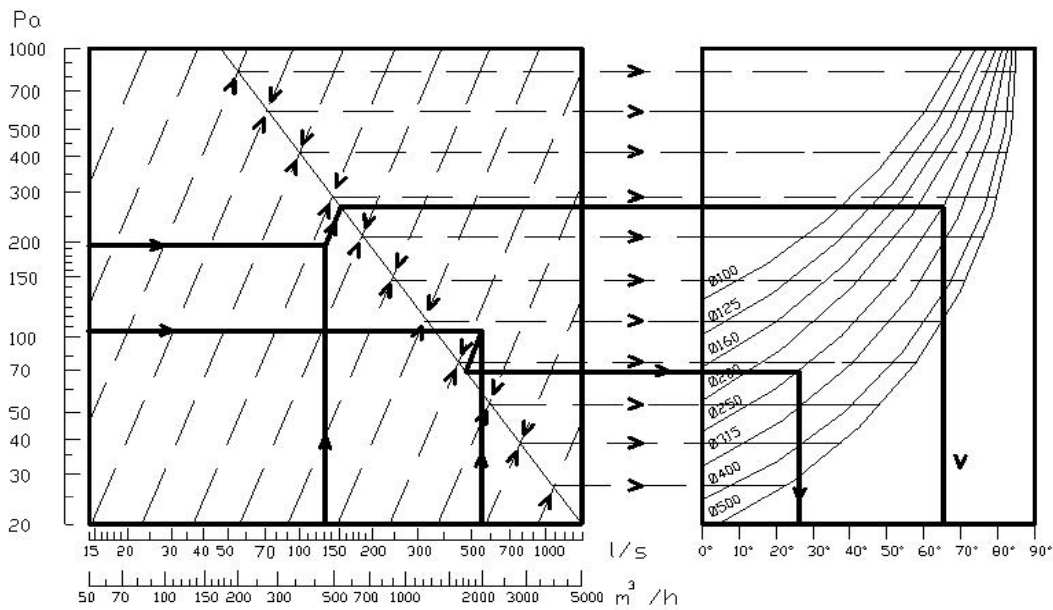
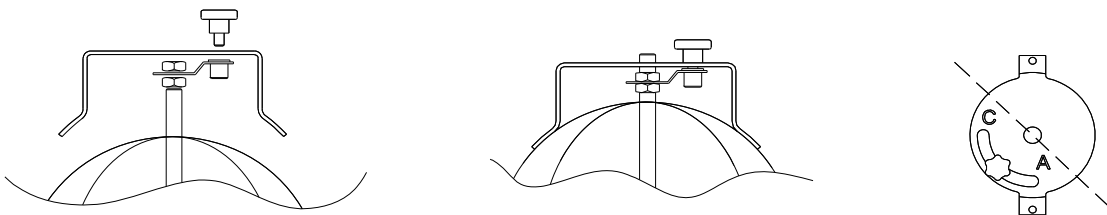
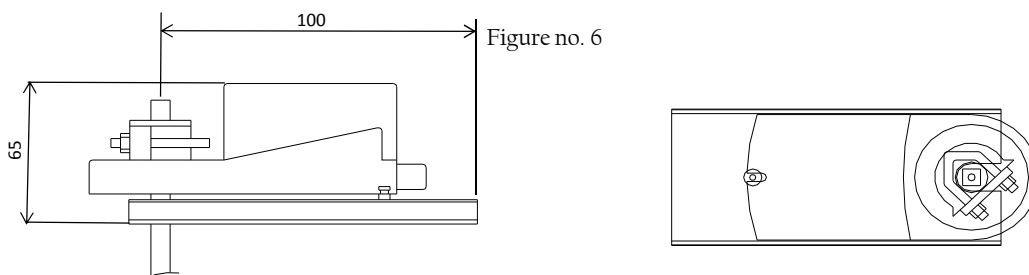


Figure no. 5



Mechanism, manual control: Standard kit (figure no. 5) is constituted by a knob to handle for moving and fixing, lever of swinging shaft, adjustable plate fixed on the frame.



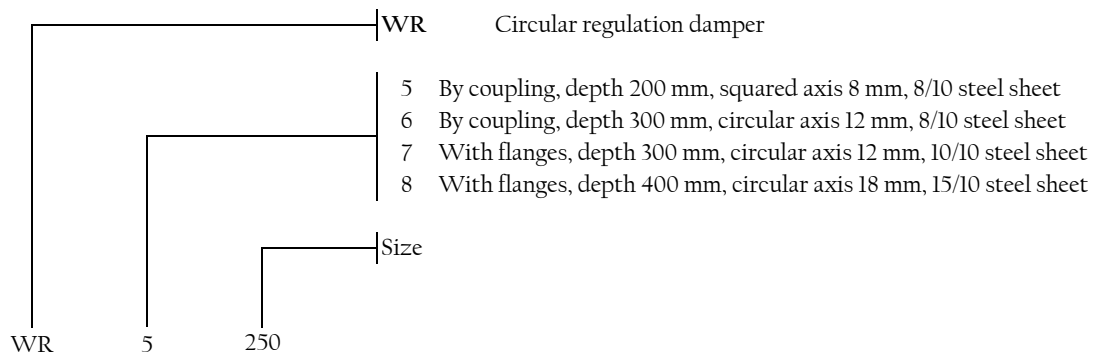
Mechanism, servo control: This kit (figure no. 6) permits to obtain the damper remote control by electric signal. It's constituted by transmission axle and adjustable plate fixed on the frame. This plate is drilled in order to fix standard actuators



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HOW TO ORDER



standard diameters			
WR 5	WR 6	WR 7	WR 8
100		100	
125		125	
150		150	
160		160	
175		175	
200		200	
225		225	
250		250	
275		275	
300		300	
315		315	
	350	350	
	400	400	
	450	450	
	500	500	
	550	550	
	600	600	
	650		650
	700		700
	710		710