

ETT100 Galvanised steel regulation dampers for high temperatures 100 mm pitch



Description

Patented rectangular galvanised steel regulation dampers for high temperatures with a 100 mm pitch, with steel rotating pins on brass bushings. They can be used for the regulation and balancing of air flow rates and pressures in air conditioning and ventilation systems and in air handling units. This innovative damper, thanks to the special shaping of its frame and the blade stops, guarantees significant advantages:

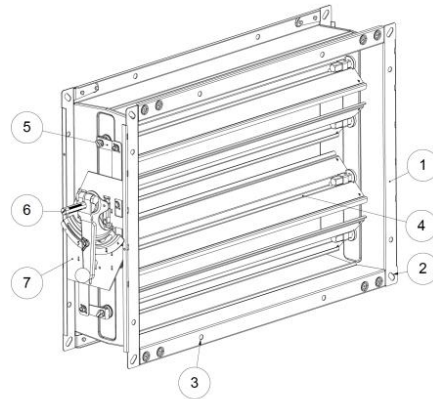
- 1) completely free air passage;
- 2) strong reduction in pressure drop;
- 3) strong reduction in self-generated noise.

These features also guarantee limited air leakage when the damper is closed.

An innovative universal metal plate allows for the application of all manual or motorised controls. The opening and closing of the blades takes place by means of a manual control located on one side of the damper, connected to an external lever system. The same movement can be achieved by means of a wide range of servomotors that allow for a more accurate regulation of the passage of air in the duct.

Construction details

- 1) Flanged frame;
- 2) Slotted holes for fastening;
- 3) Additional holes for fastening;
- 4) Regulation blades;
- 5) Steel levers and pins;
- 6) Control pin;
- 7) Universal plate for manual control or servomotor.



Constructive features

Material: galvanised steel frame, blades and external levers, galvanised steel control pin $\varnothing 12$ mm, brass bushings.

Installation: by means of bolts on slotted holes (detail 2) located in the corners of the frame and on additional intermediate holes (detail 3)

Operating temperature: -20°C $+150^{\circ}\text{C}$

Available models

- ETT100P damper with blades with opposing movement with pin diam. 12 mm;
- ETT100C damper with blades with opposing movement with manual control (accessory).

Models on request

- ETT100P damper with blades with parallel movement with pin diam. 12 mm;
- ETT100C damper with blades with opposing movement with manual control (accessory).

Accessories:

EARG175K: manual control;

BELIMO SERVOMOTOR: electronic servomotor

Nominal size

For dampers with a width (L) > 1250 mm ≤ 2500 mm, a 30 mm thick breaker will be placed in a central position.

For dampers with a width (L) > 2500 mm ≤ 3000 mm, two 30 mm thick breakers will be placed at the same distance.

The dampers can have the following maximum dimensions:

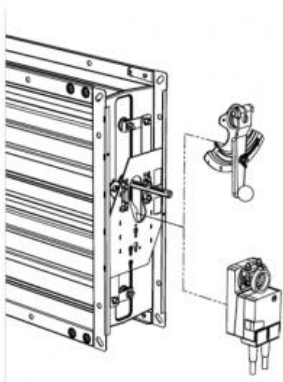
$L \leq 3000$ x $H \leq 1500$

$L \leq 2000$ x $H \leq 2000$

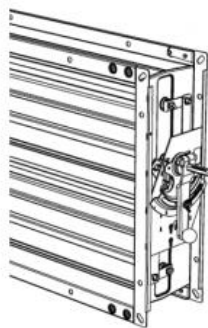
$L \leq 1500$ x $H \leq 3000$

Dimensional characteristics:

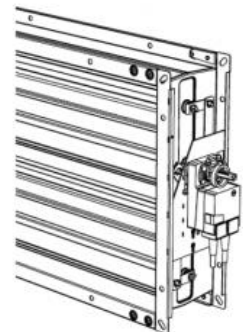
Perno e piastra universale (standard)



Comando manuale



Servomotore



		Servomotors WITH SPRING RETURN				
		TF	LF	NF	SF	EF
Torque		2,5 Nm	4 Nm	10 Nm	20 Nm	30 Nm
Universal clamp for pin size (mm):		6-12,7	8-16	10-22	10-22	12-26,7
For dampers up to:		0,5 m ²	0,8 m ²	2 m ²	4 m ²	6 m ²
ON/OFF 3-Point	AC/DC 24 V	TF24	LF24	NF24A	SF24A	EF24A
	AC/DC 24 V With auxiliary contact	TF24-S	LF24-S	NF24A-S2	SF24A-S2	EF24A-S2
	AC 230 V	TF230	LF230	NFA	SFA	EF230A
	AC 230 V With auxiliary contact	TF230-S	LF230-S	NFA-S2	SFA-S2	EF230A-S2
MODULATING 0-10V command	AC/DC 24 V	TF24-SR	LF24-SR	NF24A-SR	SF24A-SR	EF24A-SR
	AC/DC 24 V With auxiliary contact			NF24A-SR-S2	SF24A-SR-S2	EF24A-SR-S2
	AC 230 V	TF230-SR				

Price list (ETTC100P damper with pin):

L: Length

H: Height

all dimensions are expressed in mm

H	L						
	200	300	400	500	600	700	800
	euro	euro	euro	euro	euro	euro	euro
200	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
300	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
400	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
500	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
600	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
700	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
800	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
900	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
1000	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
1100	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
1200	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
1300	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
1400	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
1500	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v

H	L						
	900	1000	1100	1200	1300	1400	1500
	euro	euro	euro	euro	euro	euro	euro
200	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
300	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
400	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
500	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
600	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
700	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
800	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
900	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
1000	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
1100	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
1200	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
1300	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
1400	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
1500	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v

Price list (ETTC100C damper with pin and manual control):

L: Length

H: Height

all dimensions are expressed in mm

H	L						
	200	300	400	500	600	700	800
	euro	euro	euro	euro	euro	euro	euro
200	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
300	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
400	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
500	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
600	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
700	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
800	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
900	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
1000	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
1100	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
1200	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
1300	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
1400	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
1500	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v

H	L						
	900	1000	1100	1200	1300	1400	1500
	euro	euro	euro	euro	euro	euro	euro
200	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
300	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
400	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
500	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
600	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
700	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
800	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
900	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
1000	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
1100	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
1200	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
1300	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
1400	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v
1500	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v	a.r. v

Servomotor price list:

The prices in the table refer to the servomotor installed on the damper.

Model	Euro	Model	Euro
CM24-L	242,87 v	TF24	372,92 v
		TF24-S	441,75 v
CM230-L	258,18 v	TF230	401,61 v
		TF230-S	470,45 v
CM24-SR-L	353,80 v	TF24-SR	504,87 v
		TF230-SR	558,45 v
Model	Euro	Model	Euro
LM24A	292,59 v	LF24	455,15 v
LM24A-S	332,78 v	LF24-S	523,98 v
LM230A	292,59 v	LF230	495,33 v
LM230A-S	332,78 v	LF230-S	562,27 v
LM24A-SR	393,94 v	LF24-SR	617,70 v
LM230ASR	468,55 v		
Model	Euro	Model	Euro
NM24A	355,71 v	NF24A	579,47 v
		NF24A-S2	657,89 v
NM24A-S	430,31 v	NFA	a.r. v
NM230A	369,10 v	NFA-S2	a.r. v
NM230A-S	441,75 v	NF24A-SR	692,31 v
NM24A-SR	512,54 v	NF24A-SR-S2	770,72 v
NM230ASR	590,96 v		
Model	Euro	Model	Euro
SM24A	411,15 v	SF24A	709,52 v
		SF24A-S2	786,03 v
SM24A-S	512,54 v	SFA	816,63 v
SM230A	422,64 v	SFA-S2	893,08 v
SM230A-S	523,98 v	SF24A-SR	820,44 v
SM24A-SR	579,47 v	SF24A-SR-S2	877,78 v
SM230ASR	655,98 v		
Model	Euro	Model	Euro
GM24A	728,63 v	EF24A	1447,72 v
		EF230A	1661,90 v
GM230A	740,09 v	EF230A-S2	1770,92 v
GM24A-SR	872,07 v	EF24A-SR	1619,81 v
		EF24A-SR-S2	1719,30 v

Accessories:

Model	Description	euro
S2A	Auxiliary contact S2A for rotary actuators WITHOUT SPRING RETURN - 2 contacts (SPDT) - Adjustable switching points	142,80 v
	Auxiliary contact S2A-F for rotary actuators WITH SPRING RETURN - 2 contacts (SPDT) - Adjustable switching points	
S2A-F	- Adapter	211,10 v
	Potentiometer suitable for use with LM..A-SR, NM..A-SR, SM..A-SR and GM..A-SR series modulating actuators (wall mounting with box)	
SGA24	Potentiometer suitable for use with LM..A-SR, NM..A-SR, SM..A-SR and GM..A-SR series modulating actuators (wall mounting without box)	a.r.
SGF24	Potentiometer suitable for use with LM..A-SR, NM..A-SR, SM..A-SR and GM..A-SR series modulating actuators (wall mounting without box)	a.r.