

SKC-C circular constant air volume dampers

The **SKC-C** series dampers are designed to facilitate balancing of ventilation systems. Damper suitable for circular duct mounting.

- Those dampers maintain the constant air volume at varying pressures, caused by connection and disconnection of system parts, clogging of filters and ducts, window opening etc.
- The adjustment knob has a graduated rate scale allows quick and easy adjustment of the desired air flow.
- Possibility of adding an actuator to automatically adjust two different airflows.
- Each nominal size damper allows a selection of flow with a ratio $V_{max} V_{min}$ 3:1.

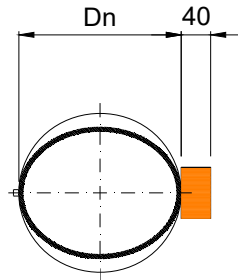
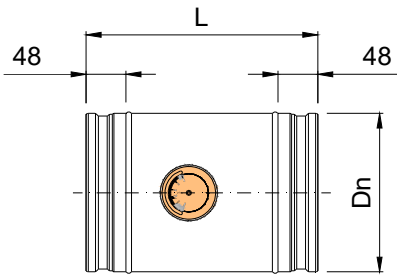
Product advantages:

- Autonomous system.
- Easy airflow adjustment.
- Possibility of working with two airflows.
- Automatic balancing of the duct network.
- Economical installation.
- Ease of maintenance.

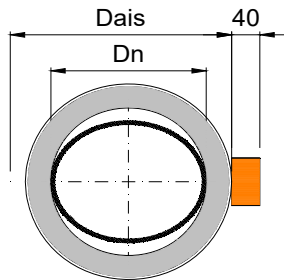
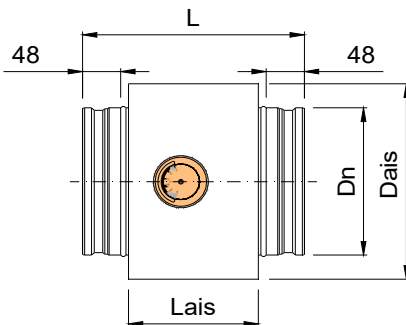


- Offices
- Hotels
- Hospitals and clean rooms

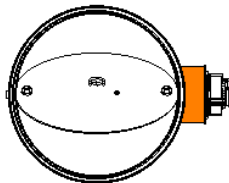
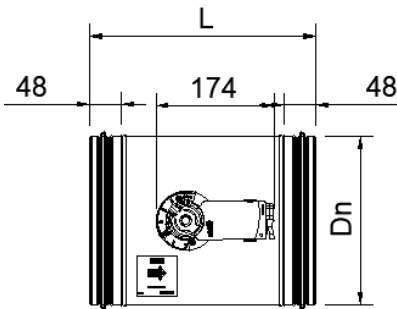
SKC-C /MA/



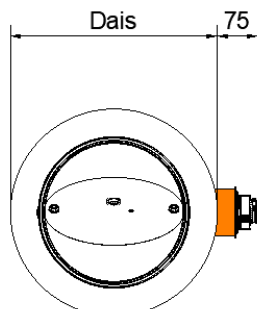
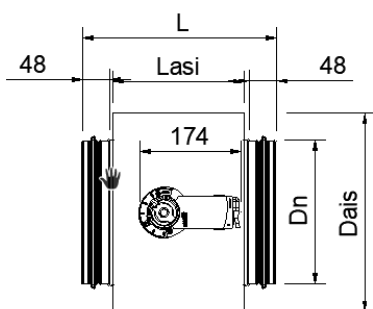
SKC-C /MA/ AIS/



SKC-C/ MK/



SKC-C /MK/ AIS/



D	Dn	Dais	L	L ais
80	78	-	225	-
100	98	178	270	157
125	123	203	270	157
160	158	238	295	182
200	198	278	295	182
250	248	328	335	222
315	313	393	340	227
355	353	433	380	267
400	398	478	420	307

CLASIFICATION

SKC-C /MA/ Circular damper with manual device for setting of one flow. Connection to the duct according to EN-1506 standard. Airtight casing according to EN-1751 standard. $100 < D(\varnothing) < 400$ EN-1751 Casing Class C.

SKC-C/MK/CM 24L...230L/ Damper with Belimo On/Off actuator at 24v or 230v 2N.

SKC-C/MK/CM 24-SX-L/ Damper with proportional Belimo actuator (2-10V) at 24v 2N.

.../AIS/ Thermal insulation with foam.

MATERIAL

Damper constructed from galvanized steel. Tightness joint from rubber.

FIXING SYSTEMS

1) Connection into a circular duct. Incorporates tightness joint from rubber to prevent air leakage in its connection to the duct.

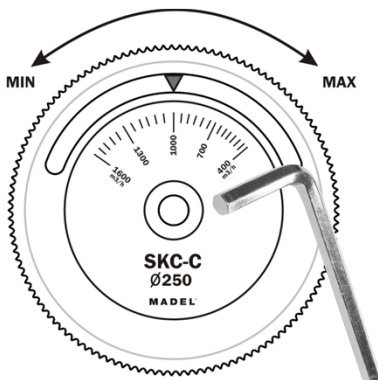
FINISHES

Galvanized steel.

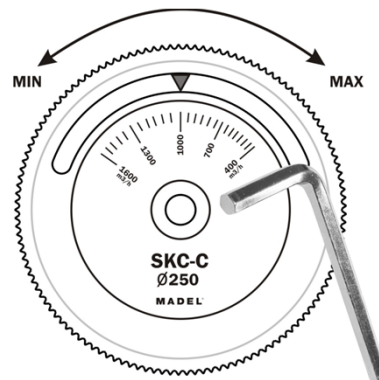
SPECIFICATION TEXT

Supply and mounting of circular constant air volume damper to facilitate balancing of ventilation systems series **SKC-C/MA** Diam. Constructed from galvanized steel and tightness joint from rubber. Airtight casing according to EN-1751 standard. Manufacturer **MADEL**.

SKC-C/MA/ MANUAL DAMPERS



UNLOCK



LOCK

1: Unscrew the central screw with an Allen key and rotate the orange knob to the desired flow rate.

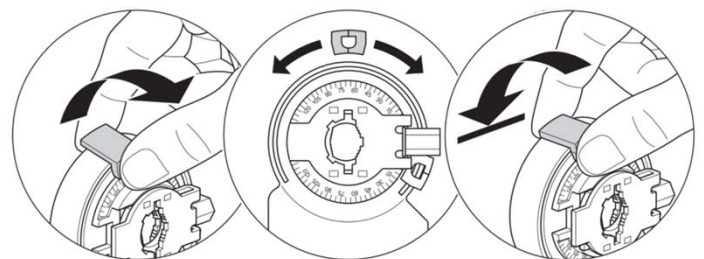
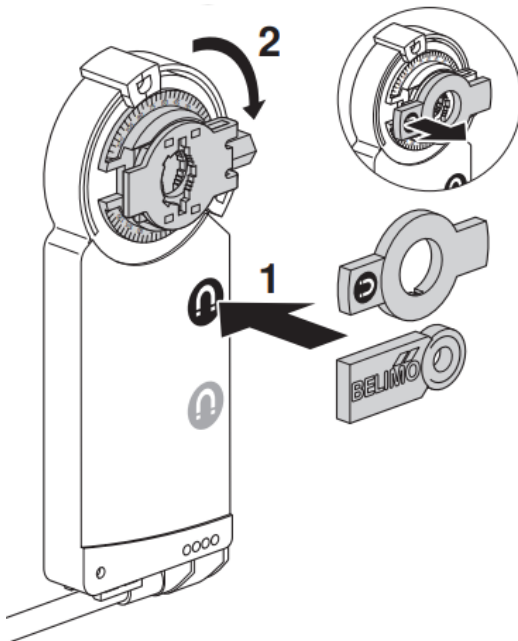
2: Once at the desired flow rate, tighten the central screw again. Medium-strong squeeze.

SKC-C/MK/CM/ MOTORIZED DAMPERS

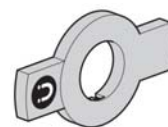
The motorized constant air volume dampers are pre-set at the maximum and minimum flow, in case you want to modify these limits, proceed as follows:

1. Remove the magnetic anti-rotation piece that is attached to the shaft of the damper (orange) Leave it glued to the magnet indicator (1) From this moment the motor shaft is released (2)

2. With your hand, remove the gray plastic stops and place them in the desired limits.



3. Reposition the anti-rotation piece on the damper shaft.



SKC-C /MK/CM/ DAMPERS CONNECTION DIAGRAMS

ON/OFF actuators

MK/CM 24L Belimo actuator 24V 2N

MK/CM 230L Belimo actuator 230V 2N

Proportional actuators (2-10V)

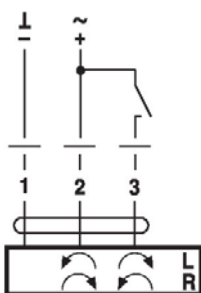
MK/CM 24-SX-L

Belimo actuator 24V 2N

CONNECTION DIAGRAMS

MK/CM24L

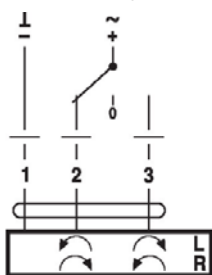
AC/DC 24 V On /Off



Wire colors

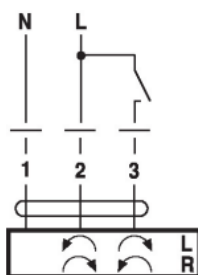
- 1 . Black
- 2. Red
- 3. White

AC/DC 24 V 3 points



MK/CM230L

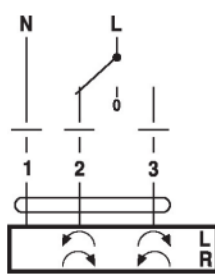
AC 230 V On /Off



Wire colors

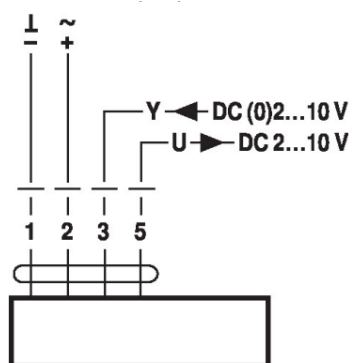
- 1 . Blue
- 2. Brown
- 3. White

AC 230 V 3 points



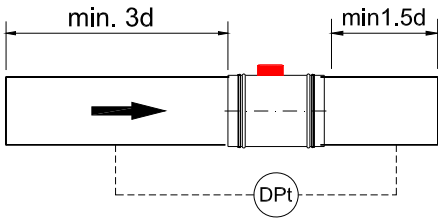
MK/CM24-SX-L

AC/DC 24 V proportional

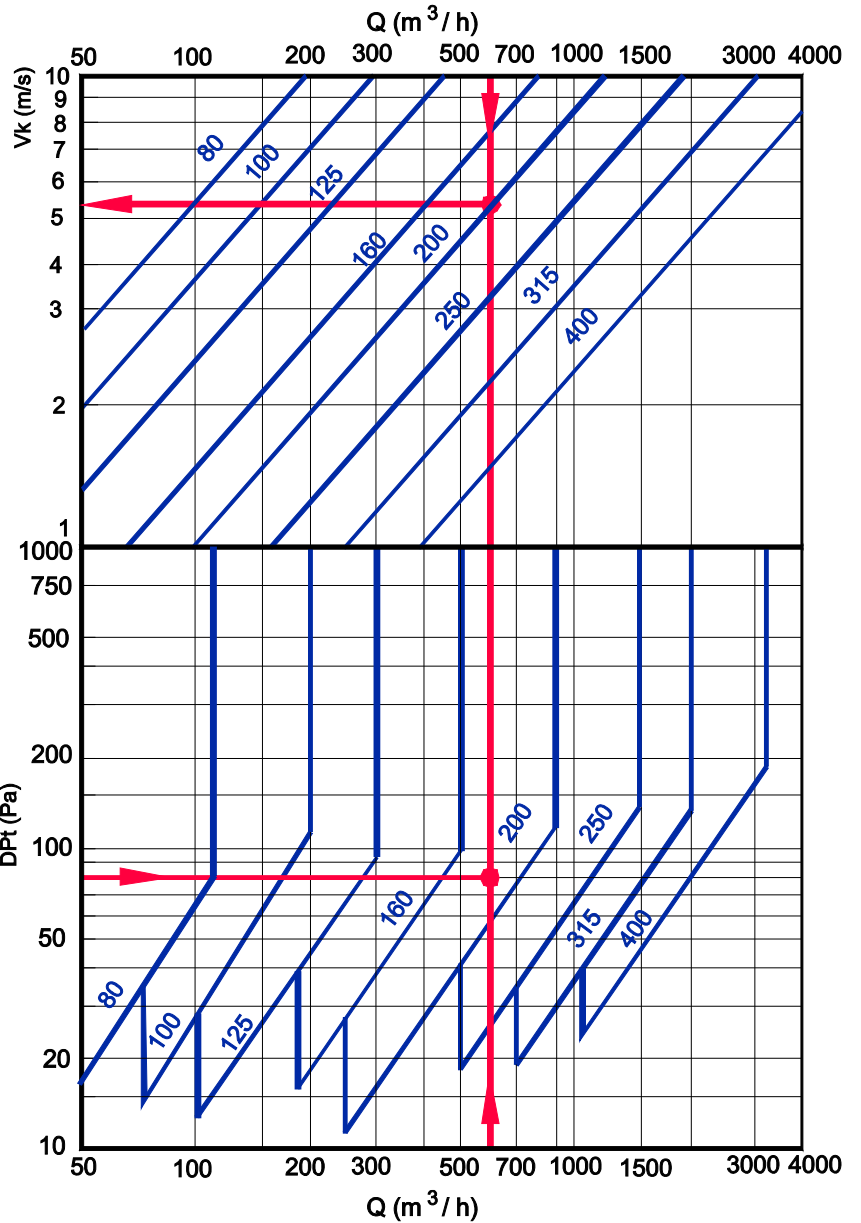


Wire colors

- 1 . Black
- 2. Red
- 3. White
- 5. Orange



FREE VELOCITY, PRESSURE LOSS



RECOMMENDED AIRFLOW

Ø	Q (m ³ /h)		dP _{min} (Pa)
	Q _{min}	Q _{max}	
80	60	150	50 < P < 1000
			115 < P < 1000
100	100	250	50 < P < 1000
			110 < P < 1000
125	100	350	50 < P < 1000
			80 < P < 1000
160	180	600	50 < P < 1000
			100 < P < 1000
200	250	900	50 < P < 1000
			125 < P < 1000
250	450	1200	50 < P < 1000
			135 < P < 1000
315	700	2100	50 < P < 1000
			220 < P < 1000
355	900	2600	50 < P < 1000
			220 < P < 1000
400	1000	3400	50 < P < 1000
			220 < P < 1000

SOUND POWER LEVEL

Ø	Q	L _{wa1}		
		100 Pa	250 Pa	500 Pa
80	40	38	50	57
	60	42	52	59
	85	45	54	61
	125	49	58	65
100	70	43	50	55
	110	46	54	60
	170	49	58	64
	210	51	60	65
125	110	44	51	56
	175	47	55	61
	265	49	58	65
	330	51	60	66
160	180	45	54	60
	290	48	57	63
	435	49	58	65
	540	51	59	66
200	280	46	57	64
	450	48	59	66
	680	50	59	67
	850	51	59	67
250	450	47	47	65
	700	49	59	66
	1060	51	59	67
	1325	52	61	67
315	700	48	60	66
	1120	50	59	67
	1680	54	60	67
	2100	57	62	68
335	890	49	61	67
	1425	50	61	66
	2150	56	62	68
	2600	61	64	70
400	1130	50	62	68
	1800	51	61	66
	2700	61	63	68
	3400	65	66	71

EXAMPLE: To keep a constant airflow in situations where there is an increment of pressure.

Airflow to keep

Q=600 m³/h)

Selected size

SKC-C 200

Difference of available pressure

P=80 Pa

Pressure range

60 < P < 1000 Pa

Velocity inside the duct

V_k = 5.3 m/s