

komfovent

AGRJ-R / AGUJ-R, AGUJ-M

PRODUCT SPECIFICATION
Version 11.0



Air regulating
and shut-off
dampers

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Product description

AGRJ-R (DR) regulating dampers and AGUJ-R (DT), AGUJ-M (DTF) shut-off dampers are designed for controlling or completely closing airflow in ventilation systems. These circular dampers are available in galvanized steel and stainless steel AISI 304, making them suitable for various operating conditions.

The operating angle ranges from 0° (fully open) to 90° (fully closed), allowing effective airflow control. Shut-off dampers are available in both manual version AGUJ-R (DT) and motorized version AGUJ-M (DTF), which enables **automated control**.



To ensure high efficiency and reliable operation, the dampers are designed with a **tight sealing level**:

- **Casing leakage class:** ATC 3 – ensures minimal air leakage through the duct system even when the damper is closed.
- **Shut-off leakage class:** Class 4 according to EN 1751 standard – ensures complete airflow shut-off when required.
- **Maximum operating temperature:** up to +80 °C
- **Maximum duct pressure:** up to 500 Pa

Designs and Dimensions

AGRJ-R (DR) and AGUJ-R (DT) Dampers

AGRJ-R (DR) regulating dampers and AGUJ-R (DT) shut-off dampers are designed for use in circular ventilation systems, providing airflow control or complete shut-off. They are manufactured from galvanized steel or stainless steel AISI 304 and are available in diameters from 100 mm to 630 mm.

The AGRJ-R (DR) damper includes an adjustable blade, while the AGUJ-R (DT) damper shares the same structural design but features a blade-mounted rubber sealing profile for airtight shut-off.

Configuration depends on diameter:

AGUJ-R-100...250-DAM / AGRJ-R-100...250-DAM	delivered in standard configuration
AGUJ-R-315...400-DAM / AGRJ-R-315...400-DAM	includes an additional handle kit (KIT-DS-H). The handle is available as a separate accessory that facilitates blade adjustment
AGUJ-R-450...630-DAM / AGRJ-R-450...630-DAM	features a reinforced blade and stainless steel axle (Ø8 mm, AISI 304). The handle is also available as a separate accessory that facilitates blade adjustment

Universal Adaptability of AGUJ-R / AGRJ-R Damper Series

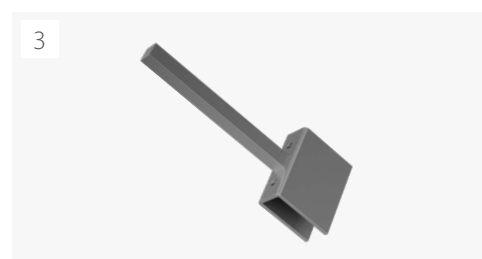
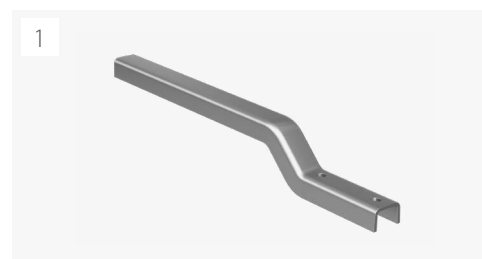
The AGUJ-R / AGRJ-R damper series is designed with a focus on universal applicability. If needed, these dampers can be easily and conveniently upgraded with an electric actuator using a dedicated accessory kit.

This makes the series especially suitable for both manual and automated airflow control, allowing for future system upgrades without replacing the damper itself.

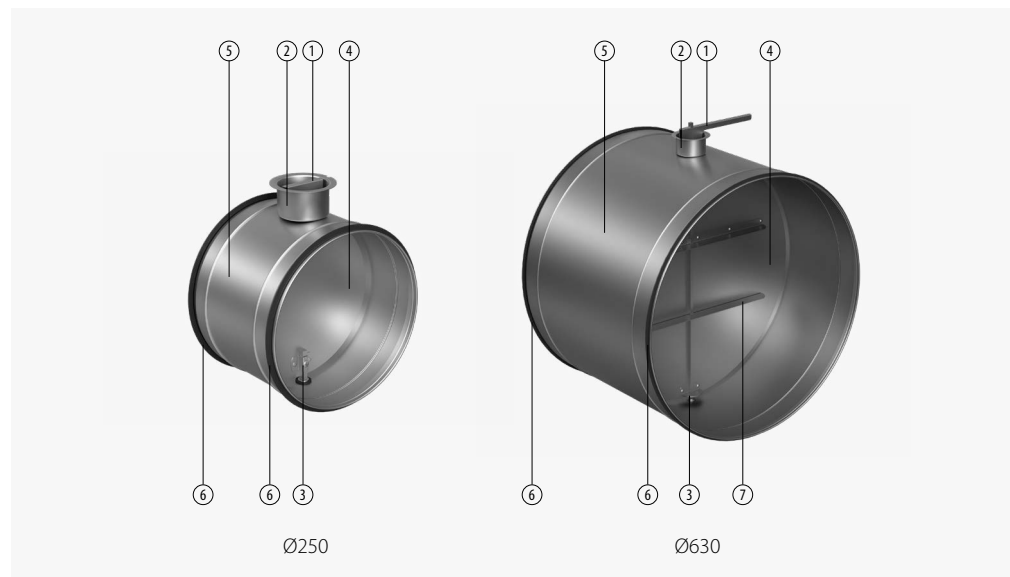
The accessory kit is available for separate purchase and includes:

- Actuator adapter KIT-DS-M [1].
- Screws (2 pcs.).
- Motor bracket (small (d100...400), large (d450...630), manufactured) [2].
- Additional screws (2 pcs. (small), 4 pcs. (large)).
- Transition - aluminum tube Ø12 (d450...630) [3].

This kit enables quick and secure installation of a Belimo actuator, converting a manually adjustable damper into an automatically controlled one.

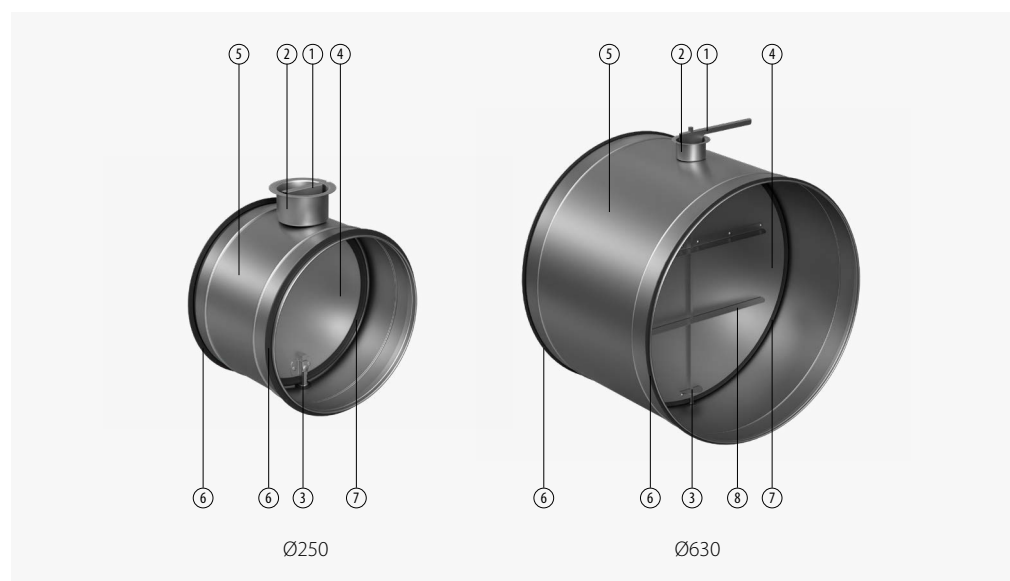


AGRJ-R (DR)



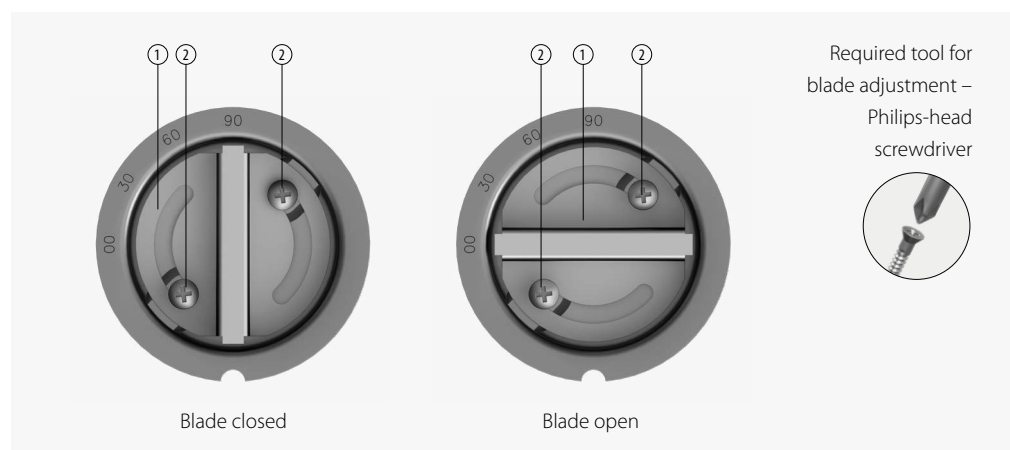
- ① 90° rotating metal handle
- ② Handle bracket
- ③ Rotating axle
- ④ Steel blade
- ⑤ Steel casing
- ⑥ Lip seal
- ⑦ Reinforcement rib

AGUJ-R (DT)



- ① 90° rotating metal handle
- ② Handle bracket
- ③ Rotating axle
- ④ Steel blade
- ⑤ Steel casing
- ⑥ Lip seal
- ⑦ Blade sealing rubber
- ⑧ Reinforcement rib

Blade



- ① 90° rotating metal handle
- ② Handle fixing screw

Three versions of the regulating handle are in use depending on the diameter of the damper to provide a smooth opening of the blade: for diameter range d100÷250 mm small metal handle is used; for diameter range d315÷400 mm small metal handle with arm is used; starting with damper diameter of 450 mm large metal lever with a wing nut is used (no tool is required for adjusting).



Automatically Controlled Shut-Off Damper AGUJ-M (DTF)

The AGUJ-M (DTF) automatically controlled shut-off damper is designed for use in circular ventilation systems, ensuring automatic regulation of airflow. The damper is manufactured from galvanized steel, with an option to use stainless steel AISI 304 upon request, and is available in diameters ranging from 100 mm to 630 mm.

The AGUJ-M (DTF) consists of a circular sheet metal casing, a durable adjustable blade, and an electric actuator mounted using an adapter and bracket. To enhance corrosion resistance, the damper is equipped with a stainless steel square shaft (8×8 mm) and blade locking washers.

Configuration by diameter:

AGUJ-M-100...400-DAM	supplied in standard configuration with actuator adapter KIT-DS-M, small actuator bracket, and 4 screws (2 + 2 additional)
AGUJ-M-450...630-DAM	equipped with a reinforced blade, stainless steel shaft (Ø8 mm), aluminum tube (t = 12 mm), large actuator bracket, cover, seals with gaskets on both sides, zinc locking plate, and 4 screws

Actuator Options

AGUJ-M (DTF) dampers can be equipped with the following Belimo actuator types, depending on the damper diameter and control requirements.

Please select the required damper diameter and the most suitable actuator type for your application (see Table 4).

An automatically shut-off damper AGUJ-M (DTF) consists of a circular sheet metal casing with a diameter ranging from 100 mm to 630 mm, a robust blade that can be adjusted to regulate the flow of air through the damper, and electric actuator. The damper admits an insulation thickness of approx. 50 mm. The casing and blade are made of a galvanized steel, stainless steel is available on request. Square 8×8 mm axle of the damper and blade locking washers are made of stainless steel to additionally protect the junction against corrosion.

AGUJ-M (DTF)



- ① Actuator
- ② Fixing ring of the actuator
- ③ Actuator's bracket
- ④ Metal axle
- ⑤ Steel blade
- ⑥ Steel casing
- ⑦ Lip seal
- ⑧ Blade sealing rubber

Brackets for the actuators are manufactured in different designs and sizes to be able to mount CM, LM, NM, TF, LF, NF, LMQ and NMQ actuators:

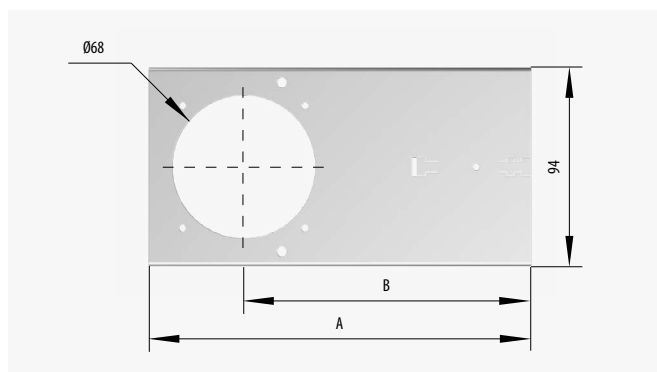


Table 1

The dimensions of the actuator's bracket vary depending on the diameter of the damper:

D _{nom} , mm	100	125	160	200	250	315	355	400	450	500	560	630
A, mm	181	181	181	181	181	181	181	181	227	227	227	227
B, mm	136	136	136	136	136	136	136	136	182	182	182	182

For damper diameters d315÷630 mm and additional aluminum profile is used as axle transition to 12×12 mm rod. Also, different types of the blade mounting brackets are used for d100÷250 mm and d315÷630 mm dampers:



- ① Transition - aluminum tube 12×12
- ② Blade mounting bracket for d100÷400 mm dampers
- ③ Blade mounting bracket for d450÷630 mm dampers

Technical data

AGRJ-R (DR) regulating damper sizes

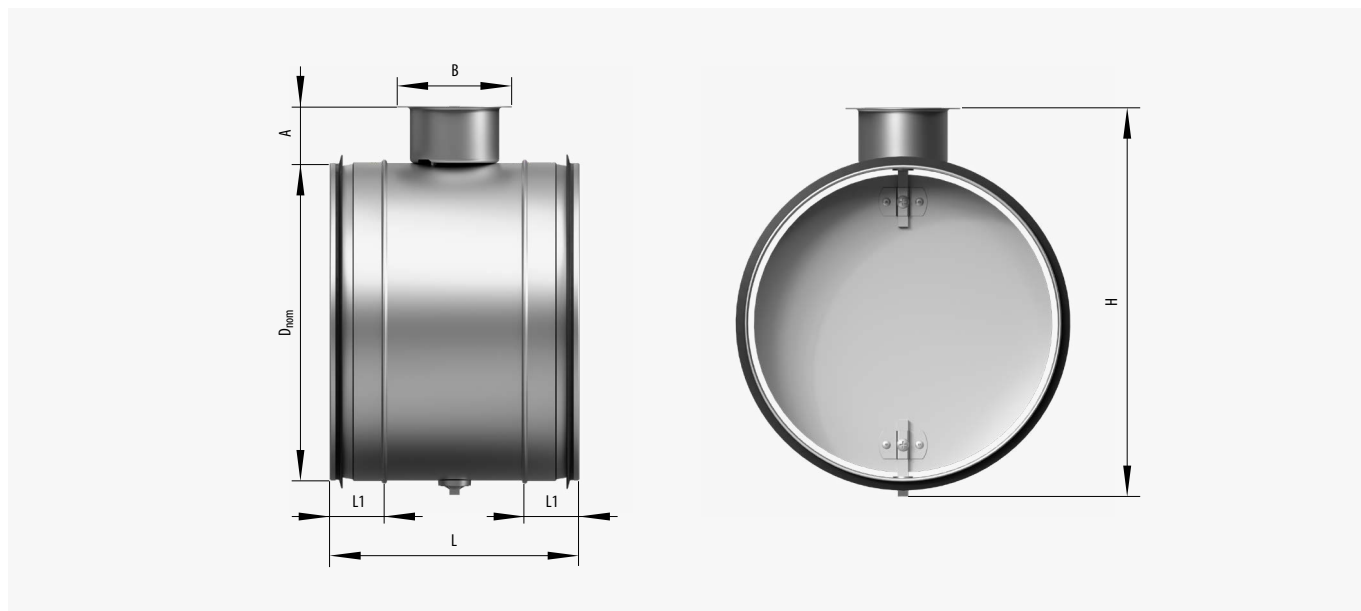
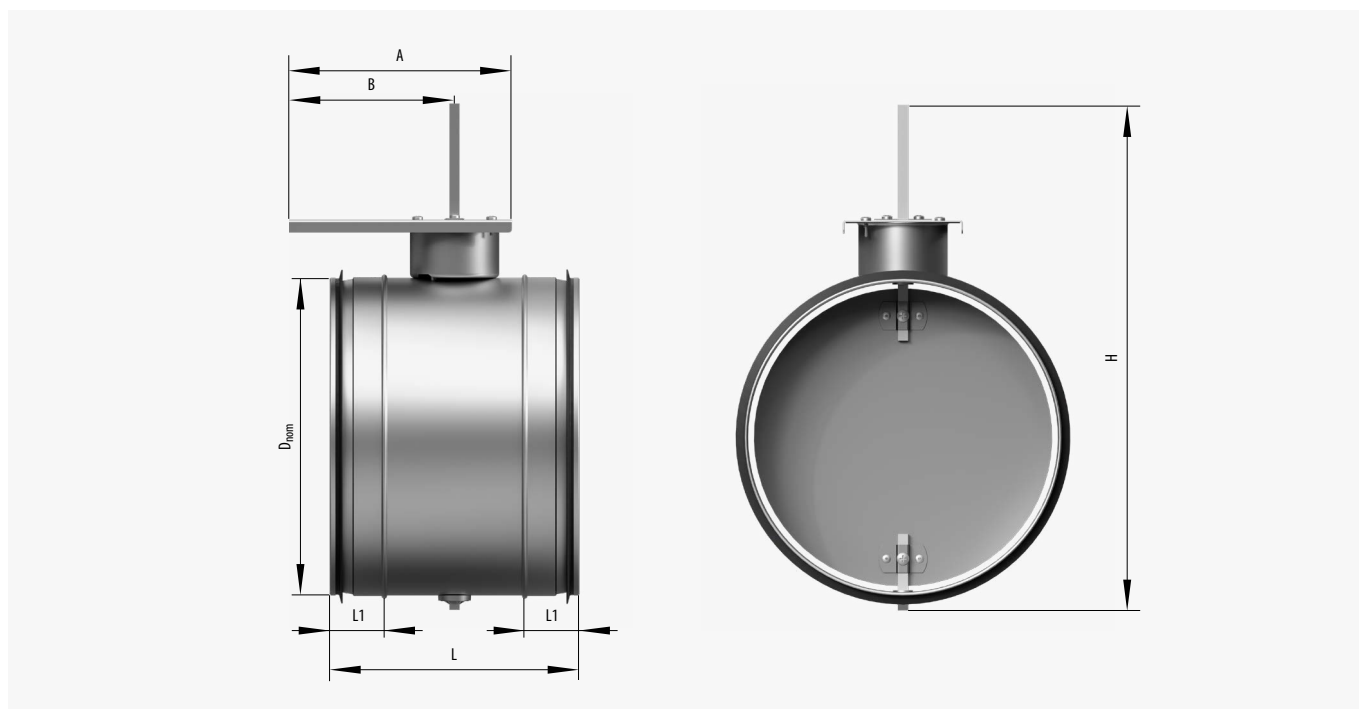


Table 2

D_{nom} , mm	L, mm	L1, mm	A, mm	B, mm	H, mm	Cross-section area, m ²	Weight, kg
100	156	40	45	90	155	0,007	0,5
125	156	40	45	90	180	0,012	0,6
160	156	40	45	90	215	0,019	0,7
200	156	40	45	90	255	0,031	0,9
250	196	40	45	90	305	0,048	1,3
315	246	40	45	90	391	0,077	2,0
355	293	40	45	90	431	0,098	3,8
400	316	65	45	90	476	0,125	4,6
450	370	65	45	90	540	0,157	6,2
500	385	65	45	90	590	0,194	7,2
560	457	65	45	90	650	0,244	9,2
630	507	65	45	90	720	0,309	11,7

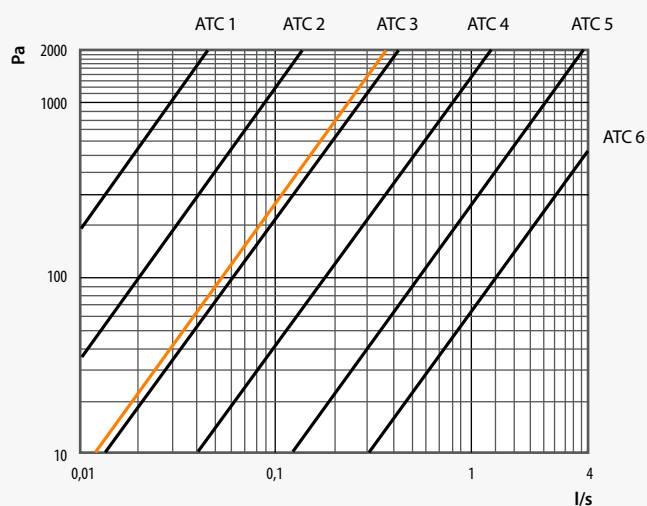
AGUJ-R (DT) and AGUJ-M (DTF) shut-off damper sizes


Table 3

D_{nom} , mm	L, mm	L1, mm	A, mm	B, mm	H, mm	Cross-section area, m ²	Weight, kg
100	156	40	181	136	248	0,007	0,7
125	156	40	181	136	273	0,012	0,8
160	156	40	181	136	308	0,019	1,0
200	156	40	181	136	348	0,031	1,2
250	196	40	181	136	398	0,048	1,5
315	246	40	181	136	464	0,077	2,1
355	293	40	181	136	504	0,098	4,0
400	316	65	181	136	549	0,125	4,8
450	370	65	227	182	600	0,157	6,2
500	385	65	227	182	650	0,194	7,2
560	457	65	227	182	710	0,244	9,2
630	507	65	227	182	780	0,309	13,8

Casing leakage

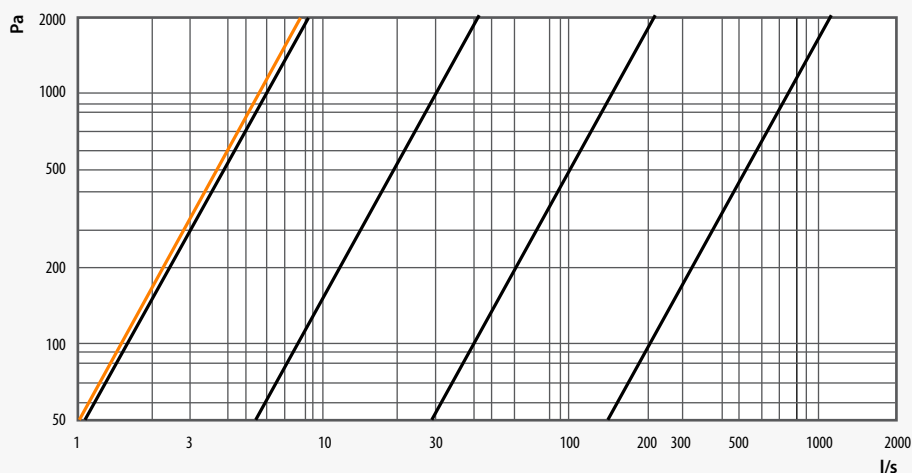
Casing leakage class offers the best result* for both regulating and shut-off dampers – Class ATC 3:



Casing leakage parameters:

- ATC 1, 2, 3, 4, 5, 6 – casing leakage class
- X – leakage factor corrected to 1m², l/s
- Y – duct pressure, Pa

Blade leakage characteristics* for AGUJ damper offers Class 4:



Blade leakage parameters:

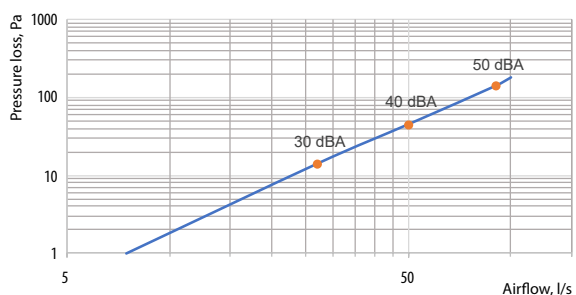
- 1, 2, 3, 4 – blade leakage class
- X – leakage factor corrected to 1m², l/s
- Y – duct pressure, Pa

* Classification obtained using a verified leakage tester and 100 mm damper leakage testing in accordance with EN 1751 specifications.

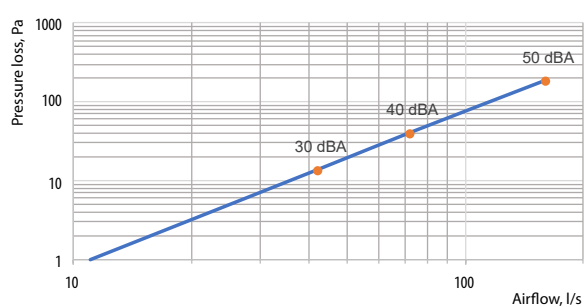
Pressure drop data

Pressure drop and attenuated sound power level graphs for shut-off AGUJ dampers at a 10° blade opening angle are shown below:

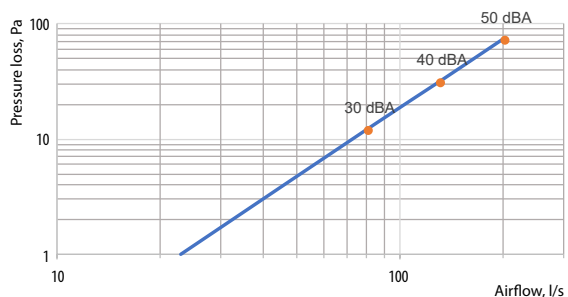
AGUJ-100



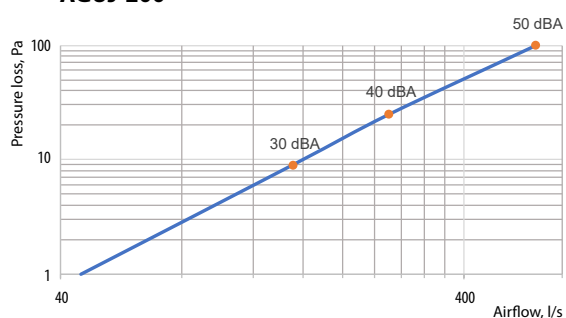
AGUJ-125



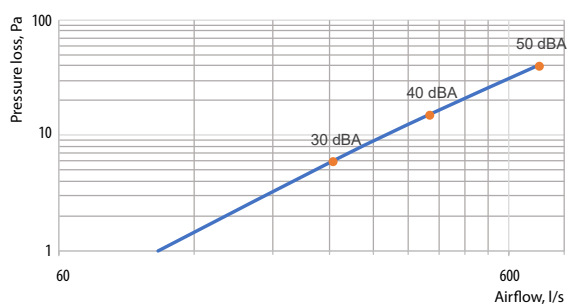
AGUJ-160



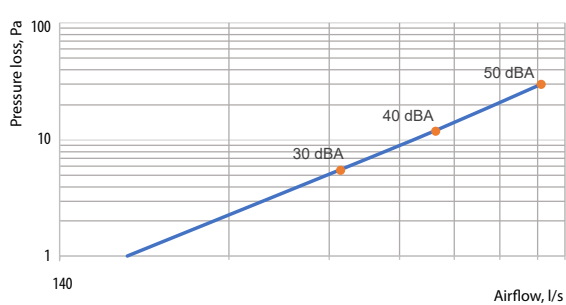
AGUJ-200

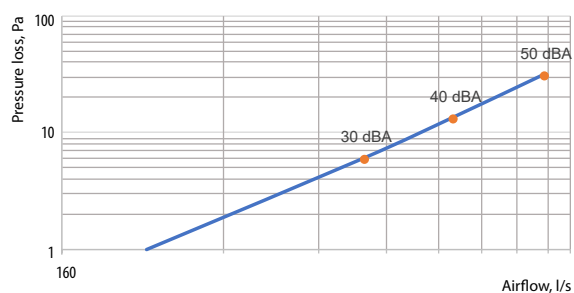
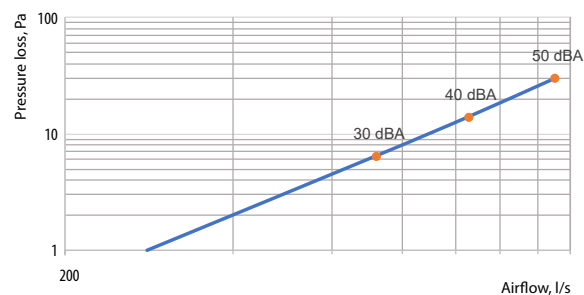
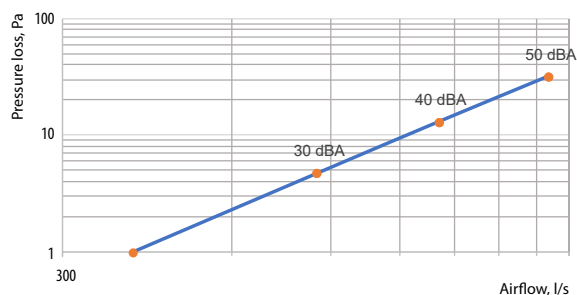
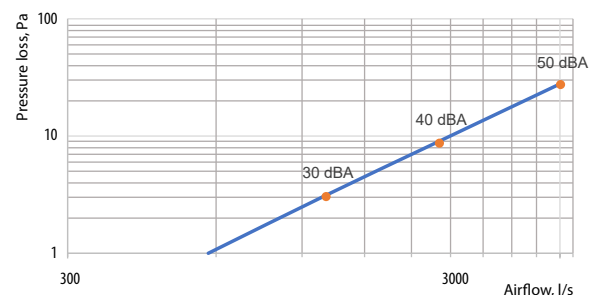
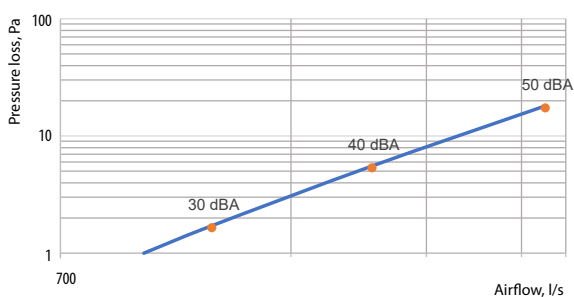
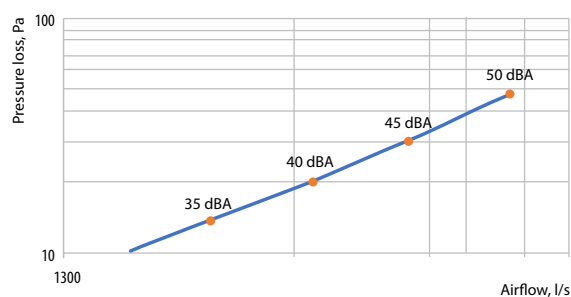


AGUJ-250



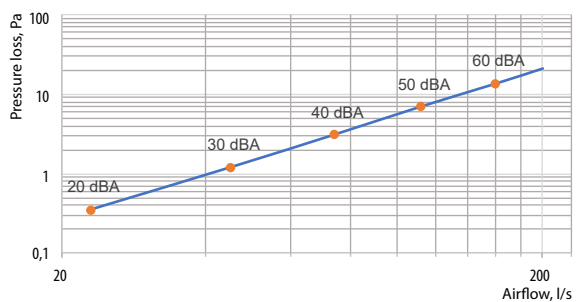
AGUJ-315



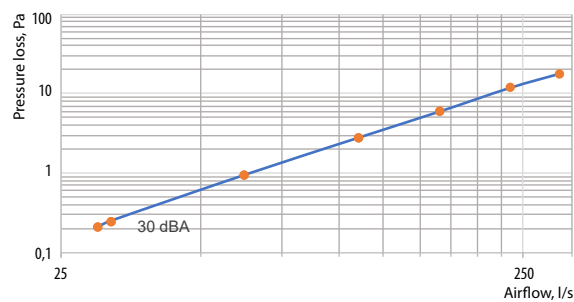
AGUJ-355**AGUJ-400****AGUJ-450****AGUJ-500****AGUJ-560****AGUJ-630**

Pressure drop and attenuated sound power level graphs for regulating AGRJ dampers at a 10° blade opening angle are shown below:

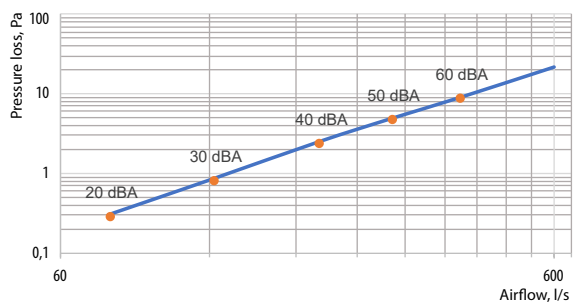
AGRJ-100



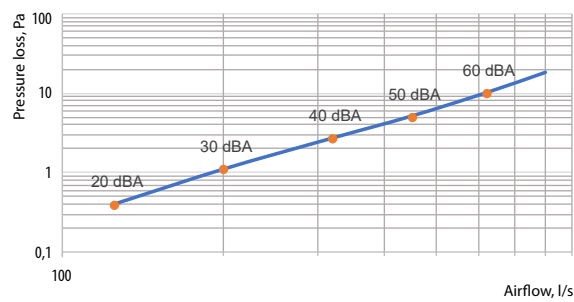
AGRJ-125



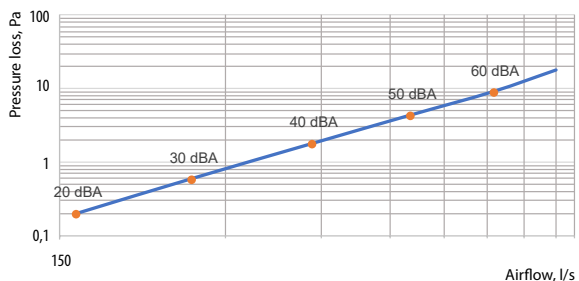
AGRJ-160



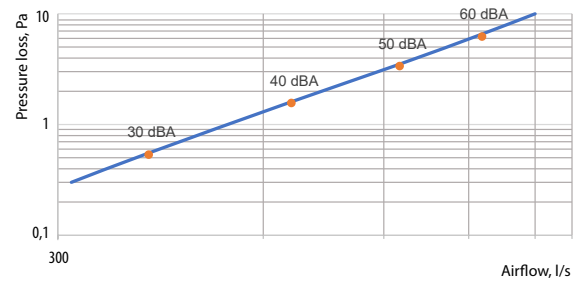
AGRJ-200

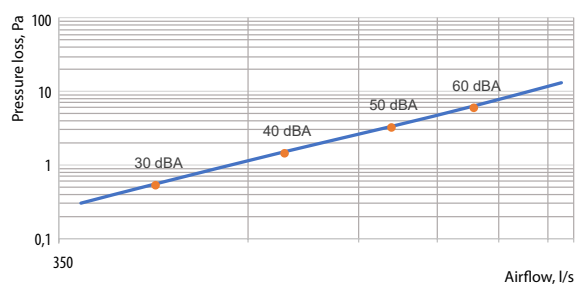
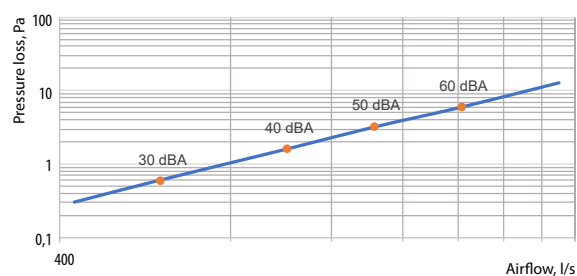
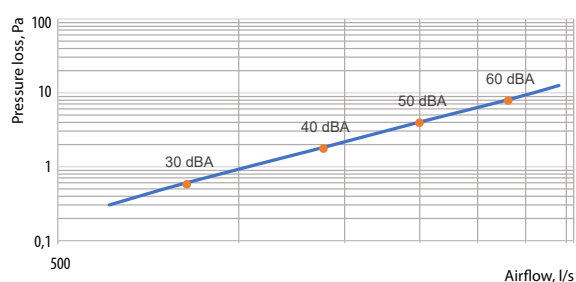
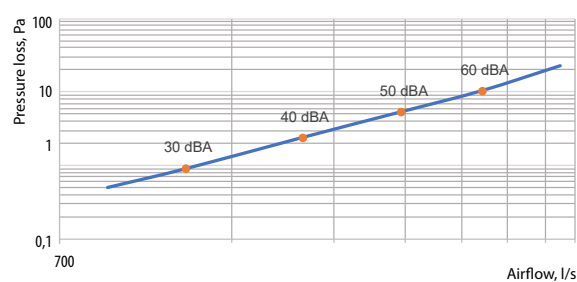
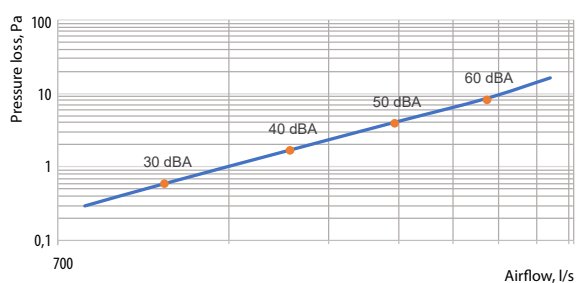
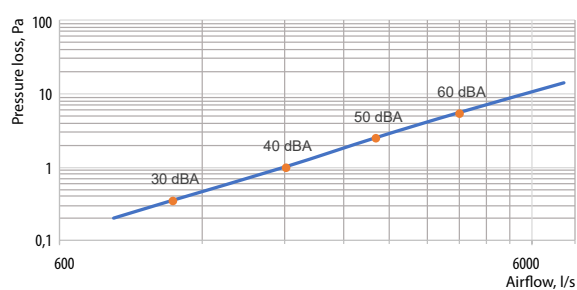


AGRJ-250



AGRJ-315



AGRJ-355**AGRJ-400****AGRJ-450****AGRJ-500****AGRJ-560****AGRJ-630**

Available Belimo model description

Table 4

Various range of actuators is available for an order for motorized AGUJ-M (DTF) damper model:

Damper Diameter (mm)	Basic Adjusting	Rotary Fail-Safe	Fast-Running	Axle Type
100	CM24/230 (2 Nm)	TF24/230 (2.5 Nm)	LMQ24/230 (4 Nm)	□8 mm
125	CM24/230 (2 Nm)	TF24/230 (2.5 Nm)	LMQ24/230 (4 Nm)	□8 mm
160	CM24/230 (2 Nm)	TF24/230 (2.5 Nm)	LMQ24/230 (4 Nm)	□8 mm
200	CM24/230 (2 Nm)	TF24/230 (2.5 Nm)	LMQ24/230 (4 Nm)	□8 mm
250	CM24/230 (2 Nm)	TF24/230 (2.5 Nm)	LMQ24/230 (4 Nm)	□8 mm
315	LM24/230A (5 Nm)	LF24/230 (4 Nm)	LMQ24/230 (4 Nm)	□8 mm
355	LM24/230A (5 Nm)	LF24/230 (4 Nm)	LMQ24/230 (4 Nm)	□8 mm
400	LM24/230A (5 Nm)	LF24/230 (4 Nm)	LMQ24/230 (4 Nm)	□8 mm
450	NM24/230A (10 Nm)	NF24/230 (10 Nm)	NMQ24/230 (8 Nm)	□12 mm
500	NM24/230A (10 Nm)	NF24/230 (10 Nm)	NMQ24/230 (8 Nm)	□12 mm
560	NM24/230A (10 Nm)	NF24/230 (10 Nm)	NMQ24/230 (8 Nm)	□12 mm
630	NM24/230A (10 Nm)	NF24/230 (10 Nm)	NMQ24/230 (8 Nm)	□12 mm

Table 5. CM Actuator for air damper


Model	CM-230-L	CM-24-L	CM-24-SR-L
Torque	2 Nm (up to 0,4 m²)		
Return spring	No	No	No
Damper control	Open/close	Open/close	Modulating
Code	743000012	743000038	743041173
Weight, kg	0,22	0,22	0,22

Table 6. LM Actuator for air damper


Model	LM-230A	LM-24A	LM-24A-SR	LM-230A-S	LM-24A-S
Torque	5 Nm (up to 1,0 m²)				
Return spring	No	No	No	No	No
Damper control	Open/close	Open/close	Modulating	Open/close	Open/close
Code	354501505	354501501	354501508	743065300	354501503
Weight, kg	0,5	0,5	0,5	0,5	0,5

Table 7. NM Actuator for air damper


Model	NM-230A	NM-24A	NM-24A-SR	NM-230A-S
Torque	10 Nm (Up to 2,0 m²)			
Return spring	No	No	No	No
Damper control	Open/close	Open/close	Modulating	Open/close
Code	354501512	354501510	354501515	1010271
Weight, kg	0,75	0,75	0,8	0,8

Order example

AGRJ-R-d-DAM (DR) damper type

AGRJ – R – (DR) – d

①

②

③

④

① **Damper type:** Circular regulating damper② **Activation type:** Manual rotating handle③ **Material:** Handle and axle are made of steel④ **Diameter:** Nominal diameter, mm

Order example: AGRJ-R (DR) – 100

AGUJ-R-d-DAM (DT) damper type

AGUJ – R – (DT) – d

①

②

③

④

① **Damper type:** Circular shut-off damper② **Activation type:** Manual rotating handle③ **Material:** Handle and axle are made of steel④ **Diameter:** Nominal diameter, mm

Order example: AGUJ-R – 250

AGUJ-M-d-DAM (DTF) damper type

AGUJ – M – (DTF) – d – A

①

②

③

④

⑤

① **Damper type:** Circular shut-off damper② **Activation type:** Electric actuator③ **Material:** Axle is made of steel④ **Diameter:** Nominal diameter, mm⑤ **Actuator model**

Order example: AGUJ-M (DTF) – 250 – NFA



DECLARATION OF PERFORMANCE

Nr. BPD-16-09-2025/AGxJ-DAM

1. Unique identification code of the product-type: *round air regulating damper AGRJ-R-DAM (DR), round airtight shutoff regulating damper AGUJ-R-DAM (DT) and AGUJ-M-DAM (DTF).*
2. Type, batch or serial number or any other element allowing identification of the construction product: *manually controlled round air regulating damper AGRJ-R-[100÷630], motorized round air regulating damper AGRJ-M-[100÷630], manually controlled round airtight shutoff regulating damper AGUJ-R-[100÷630], motorized round airtight shutoff regulating damper AGUJ-M-[100÷630].*
3. Intended use or uses of the construction product, as foreseen by the manufacturer: *to regulate the amount of supplying air (AGRJ) and to seal the duct (AGUJ).*
4. Name, registered trade name or registered trade mark and contact address of the manufacturer:
Komfovent Ltd., Reg. No. 40103817958
Address: Bukaisu street 1, Riga, LV-1004; phone: +371 67201572, info.lv@komfovent.com
5. Declared performance:

Essential characteristics	Performance	Technical specification
Circular fitting cross - section nominal diameter	from Ø100 till 630 mm	EN 1506:2007 Ventilation for buildings. Sheet metal air ducts and fittings with circular cross - section. Dimensions.
Casing leakage class	ATC 3 – OLD “C”	EN 1751:2024 Ventilation for buildings – Air terminal devices - Aerodynamic testing of dampers and valves.
Blade leakage class (for AGUJ only)	Class 3	
All metal parts are made of galvanized steel	DX51D+Z275 (chemical passivation. Zinc layer thickness – 275g/m ²)	EN 10346:2015 Continuously hot-dip coated steel flat products for cold forming. Technical delivery conditions.
All metal parts are made of stainless steel (for AGRJ-N and AGUJ-N modifications only)	AISI 304	EN 10028-7:2016 Flat products made of steels for pressure purposes - Part 7: Stainless steels.

6. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 5.

This declaration is issued under the sole responsibility of the manufacturer identified in point 4. Signed for and on behalf of the manufacturer by:

SIA Komfovent
Head of Technical Department
Kristaps Grauzdulis
Riga, 16-09-2025

This declaration is issued in accordance with Republic of Latvia Cabinet Regulation No. 156 “Procedures for the Market Surveillance of Construction Products” point 30.⁸ requirements.

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