

Lindab **Dampers & Measure units**

Product overview

For a better climate

Most of us spend the majority of our time indoors. Indoor climate is crucial to how we feel, how productive we are and if we stay healthy.

We at Lindab have therefore made it our most important objective to contribute to an indoor climate that improves people's lives. We do this by developing energy-efficient ventilation solutions and durable building products. We also aim to contribute to a better climate for our planet by working in a way that is sustainable for both people and the environment.

Dampers and measuring units for optimized air volume in your duct system

Our dampers and measuring units gives you clear benefits, and helps you regulate the air flow in your building, creating a perfect indoor climate with fresh air, low sound levels, and optimum comfort.

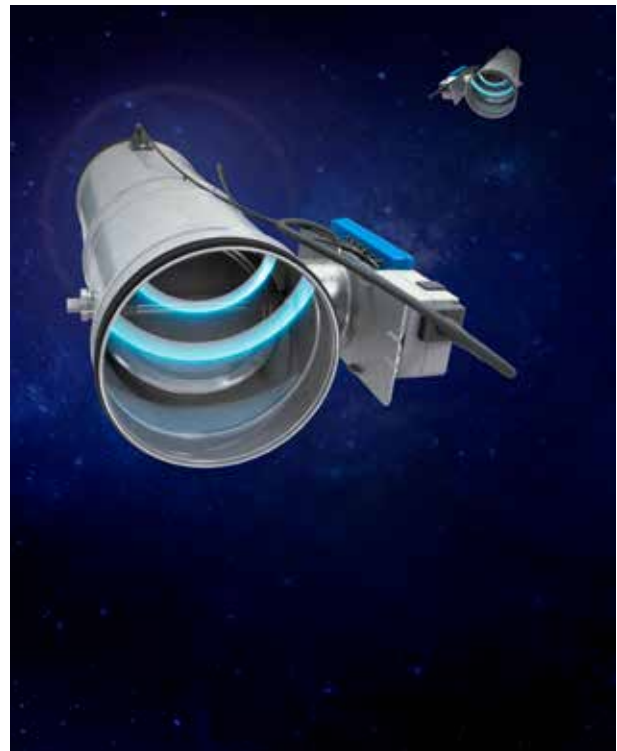
Dampers are installed in ventilating equipment for various purposes, such as: regulating, shut off, motorized, constant flow and variable flow. Flow meters are used to decide airflow rate in a duct system. Our range is extensive, and our solutions for dampers and measuring units includes; regulating dampers, shut-off dampers, cleaning dampers, constant- and variable flow units and sliding dampers.

Permanently installed flow meters gives more accurate reading than what measurement with handheld measuring equipment will give, and you can also continuously supervise the system.

You can have the dampers manual or motorized, electric or pneumatic. This means we can supply solutions for every requirement and for every segment. Regardless of whether your project is within housing, offices, industry or the marine sector.

Furthermore, our dampers and measuring units are extremely installation-friendly. Also the products with Lindab Safe and Lindab Safe Click connections are certified to strength and leakage in tightness class D according to Eurovent Certified performance program for circular metallic duct systems.

Quality, service and knowledge have always been crucial factors for the customers that have chosen us as a partner. So, behind each solution lies industry leading expertise, extensive research, evaluation and full documentation.



General

Dampers for different purposes are used in a ventilation system

Regulating dampers are used to balance the plant so that the wanted air flow is achieved.

The damper blade is normally designed so that a certain flow of air can always leak through, even if the damper is closed. This makes the sensitivity to angle changes less than for a shut-off damper.

Dampers are available in both manual and automatic versions. The manual dampers are adjusted when the installation is commissioned, and are cheaper than the automatic ones. On the other hand, manual dampers need many more hours of adjustment, and means of flow measurement. For this reason, some dampers have measuring nozzles. In large systems, or where pressure variations occur, it is better to use automatic dampers. These are also referred to as constant flow dampers.

Shut-off dampers are used to save energy, to prevent the spread of poisonous gas etc. These dampers often have rubber seals on the damper blade. The damper can either be designed as a straight piece of ducting, or as a T-piece to switch the air flow from one duct to another. The blade is normally either fully open or fully closed.

Tightness

Three types of classification is described for dampers:

1. Tightness to the environment

This specifies the magnitude of the air leakage through joints and leaks in the duct sides in relation to the duct surface. This leakage is classified into tightness classes A, B, C and D. Most dampers can be used in installations/ systems which require them to maintain tightness class D.

These casing leakages is measured as l/s/m² according to EN 1751 that stipulates a virtual surface area on the damper that is the circumference of the damper times 1 meter. The same method can be found in EN 15727.

2. Tightness past a closed damper shutter

This refers to the amount of air leaking past the closed blade, in relation to shutter area. This relationship is classified into five sealing classes 0-4. There is no tightness requirement for class 0. The classes 0 and 1 are regulating dampers. The highest class, tightness class 4, refers to very tight shut-off dampers.

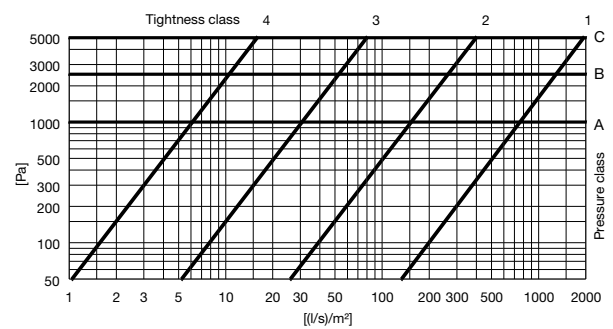
The tightness classes is measured according to EN 1751.

3. Pressure classes

This refers to the highest static pressure over the blade that is allowed to fulfill the tightness classes past a closed damper shutter. The classification is divided into three pressure classes, A 1000 Pa, B 2500 Pa and C 5000 Pa.

The pressure classes is described in the Swedish Building Code VVS AMA.

Tightness past the closed damper blade and pressure classes



Motorized dampers

Dampers can be supplied ex works with actuators installed. Various types of actuators are available, both electric and pneumatic.

Material

Standard

Bushings are made from polyamide. The bushings can withstand constant temperatures of up to 150 °C.

Special

If a higher corrosivity class is required than standard Galvanized Z275 (C3), some of the dampers can be produced from several material such as:

- [Stainless steel EN 1.4301 \(AISI 304\)](#)
- [Stainless steel, acid proof EN 1.4404 \(AISI 316L\)](#)
- [Aluminium Zink AZ 185](#)
- [ZinkMagnesium ZM 310](#)
- Powder coated polyester epoxy

You can read about the corrosivity of the different materials in our [General information and theory](#).

The blades can also be provided with silicone rubber seals for higher temperature operation. The dampers can then withstand constant temperatures of 150 °C and 200 °C intermittent. In these cases, please contact Lindab.

CE-labeling

Our dampers with electrical shifting motor are regarded as components of the duct system and need not to be separately CE-labeled. Their electrical shifting motor on the contrary is a part of the electrical system and is CE-labeled. Assurance of conformity can be found at www.belimo.com.

Blade setting

DRU and DSU dampers of dimensions Ø63–160 are supplied with their blades completely open, to facilitate adjustment preparations. Dampers of other dimensions are supplied with closed blades to prevent transport damage.

Cleaning of duct system

Most dampers have components which obstruct the duct system to a greater or lesser extent, and thus obstruct or prevent cleaning.

Motorized dampers

In this overview we show our standard range of motorized dampers. Other combinations of dampers and motors can be ordered, and it is also possible to build your own motorized damper using a standard damper and buy accessories from Lindab.

Please read more about this in our mounting instruction for dampers by clicking [here](#) or visiting www.lindab.com.

Eurovent certification

Lindab's circular duct system with rubber gasket connections Lindab Safe and Lindab Safe Click is certified to strength and leakage in tightness class D according to the Eurovent Certified Performance program for circular metallic ducts systems (DUCT-MC). Check ongoing validity of certificate:

www.eurovent-certification.com



The circular dampers with the safe and safe click connection is a part of this system certification program.

Lindab products that are Eurovent certified have the Eurovent logotype in the footer of the technical documentation.

Note: Most Lindab Safe and Lindab Safe Click and the most commonly used product in a ventilation system are essentially better than class D, however some products are according to EN 15727 not class D as a single product. These products are stated in the documentation as Class C and can be used in D class systems to a limited extension.

lindQST – Lindab Quick Selection Tool

[lindQST](#) is an advanced web tool that makes the selection of our solutions quick and simple.

With lindQST all documentation is made available directly on the web. That means consultants, installers and architects always have access to the latest documentation, installation instructions and product images etc. lindQST is a unique online tool where you can simulate your room in the Indoor Climate Designer, keep track of your projects and share it with your business partners etc. lindQST provides a simple shortcut to Lindab's material and is a tool that speeds up and simplifies the daily work. All information is just a mouse-click away.



Product overview

Shut-off dampers

Manual



DSU



DTU



DTMU

Prepared for motor



DTHU



DTH1U



DTH2U

With on-off motor



DTBU



DTBCU



DTBLU



DTFU



DSUSN

With modulating motor



DTBVU



DSVUSN



DIRBU / DIRVU

Pneumatic



DTPU

Balancing dampers

Manual



DRU



DIRU

Click on the product for link to detailed technical information, or visit www.lindab.com

Air flow measuring units



FTMU (UltraLink)



FRU



FRA



FMU



FMDU



FMDRU

Air flow regulating units



FTCU (UltraLink)



VRU



VRA

Product overview

Pressure regulating units



DRU



DIRU

Cleaning dampers



TDRU



PSDRU

Constant- & variable air flow units

Automatic dampers



DAU (constant)



VRL1 (constant)



DA2EU (2 flow)



DAVU (variable flow)

Back draft dampers



CAR



CARU



RSKA

Insulated dampers



DSUI



DRUI

Alternating dampers



TASU



TATU



TATBU

Click on the product for link to detailed technical information, or visit www.lindab.com

Sliding dampers



SKMTR



SKPTR

Product overview

Rectangular dampers



LKSR



JSM



JSMM / JSMMU

Click on the product for link to detailed technical information, or visit www.lindab.com



Accessories

Insulation cup



IK

Assembly kits



MSATS PPWS/POWS

Handles



DRHTG



HANDLE

Extension spindles



VREDF 15 60
VREDF 15 100

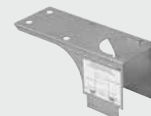


AXFL

Mounting shelves



KOMHY



KOMHY LONG



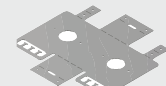
LÖMOK



HYLLA PNEU



FTPC



FTES

Sensors



SECTH



SEPTH

Tightness and pressure classes

Dampers

Pressure class*	Tightness class*				
	0	1	2	3	4
	To regulate		To shut-off		
A	DRU	DSU Ø355-1000	DSUSN		DTU Ø710-1000
	DIRU	DSVUSN	TATU		DTHU Ø710-1000
	DIRBU		TATBU		DTBU Ø710-1000
	DIRVU				DTBVU Ø710-800
	DSU Ø63-315				
	PSDRU				
	TDRU				
	TASU				
	DAU				
	VRL1				
	DA2EU				
	DAVU				
	B				
					DTMU Ø355-630
					DTHU Ø355-630
					DTH1U Ø355-630
					DTBU Ø355-630
					DTBCU Ø355-630
					DTBVU Ø355-630
					DTPU Ø355-630
					FTCU Ø400-630
				VRU Ø400-630	
C					DTU Ø80-315
					DTMU Ø80-315
					DTHU Ø80-315
					DTH1U Ø80-315
					DTH2U Ø80-315
					DTBU Ø80-315
					DTBCU Ø80-315
					DTBVU Ø80-315
					DTFU Ø80-250
					DTBLU Ø80-315
					DTPU Ø80-315
					FTCU Ø100-315
					VRU Ø100-315

Click on the product for link to detailed technical information, or visit www.lindab.com

* see page 3



Click or scan the QR-code to view mounting instructions for our dampers >>

Or visit lindab.com



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